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Founded 1876

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THE ROYAL SOCIETY OF HEALTH

90 BUCKINGHAM PALACE ROAD, LONDON, S.W.1

O.B., Truro.

—February, 1963

THE
REGISTRAR GENERAL'S
STATISTICAL REVIEW
OF
ENGLAND AND WALES

FOR THE YEAR
1960

PART III
COMMENTARY

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EXPLANATORY NOTES

1. Populations

The estimates of population appearing in this volume and described as " home " or " total " populations have the following content:

Home population—the population, of all types, actually in England and Wales, distributed by area according to residence.

Total population—the home population *plus* members of H.M. Forces belonging to England and Wales and serving overseas but *minus* the Forces of other countries temporarily in England and Wales.

2. Numbering of tables

Of the tables referred to in this review, those numbered in Arabic numerals will be found in " Part I, Tables, Medical " and those lettered will be found in " Part II, Tables, Population " for the year in question, while those numbered in Roman numerals appear in this volume.

3. Standardised mortality comparison

The Comparative Mortality Index introduced in 1942 has since 1958 been replaced by a Standardised Mortality Ratio which shows the number of deaths registered in the year of experience as a percentage of those which would have been expected in that year had the sex/age mortality of a standard period (1950–1952) operated on the sex/age population of the year of experience.

These Standardised Mortality Ratios are shown in **Tables XLIII, XLVIII, LXXXI, LXXXII, LXXXVII, XCI, XCV,** and **CI** of the present volume.

4. Indication of reliability

Rates given as 0 indicate that the actual rate is less than one half of a unit. A dash (—) in any column indicates that there were no events. Where a cell has been left blank no denominator is available.

Rates based upon less than 20 events are distinguished by italic type as a warning to the user that the smallness of the experiences may affect their reliability as a measure of the underlying mortality.

Numbers

If d represents the deaths in an area and p the population in that area then, if d/p is small, the standard error (s.e.) of d is approximately $\sqrt{d}$ assuming that the deaths are independent of one another. Clearly, the larger the number of deaths the smaller will be the proportionate variability. A deviation either way of twice the s.e. may be expected about once in 20 times. Using this criterion one might expect towns each averaging 20 deaths per year to yield in the same year numbers ranging between 11 and 29 without such differences having any statistical significance. Alternatively it could be said that if 20 deaths were recorded for a town, this number would have a 95 per cent confidence interval of approximately ± 9, there being a 95 per cent chance that the underlying mortality is represented by a number of deaths within this interval.

If d is thought to be an extreme variation it would be more reliable to use as the standard error not $\sqrt{d}$ but $\sqrt{d'}$ where d' is the number of deaths expected if some standard rate (e.g. the national rate) were applied.

Rates

The appropriate standard error of a death rate when d represents the number of deaths and p the population is

$$\frac{\sqrt{d}}{p} \text{ or } \frac{m}{\sqrt{d}}$$

where m is the death rate. The difference between two local death rates m_1 and m_2 can only be regarded as significant if it amounts to more than twice the standard error of the difference, viz.

$$2 \sqrt{\left(\frac{m_1^2}{d_1} + \frac{m_2^2}{d_2} \right)}.$$

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Comparison of adjusted rates

Before comparisons are made, other known sources of variation (such as differences in the sex and age composition of the population) must be removed. If C is the local death Area Comparability Factor, then mC is to be compared with m', the national death rate. The s.e. of mC is

$$\sqrt{\left(\frac{mC}{p}\right)}$$

and

$$mC \pm 2 \sqrt{\left(\frac{mC}{p}\right)}$$

is to be compared with m'. As already indicated, m' can be used instead of m in the calculation of the s.e.; m' has the advantage of itself having a small sampling error.

5. Definition of areas

London A.C. = administrative county of London which consists of the City of London (including the Inner and Middle Temples) and the metropolitan boroughs.

C.B. = county borough; **M.B.** = municipal borough; **Met.B.** = metropolitan borough; **U.D.** = urban district; **R.D.** = rural district.

6. Standard regions

The constitution of the standard regions of England and Wales used in this volume is as follows:

REGION I *Northern*	REGION IV *Eastern*	REGION VI *Southern*	*Wales II (remainder)*
Cumberland	Bedfordshire	Berkshire	Anglesey
Durham	Cambridgeshire	Buckinghamshire	Caernarvonshire
Northumberland	Ely, Isle of	Dorset, Part of[6]	Cardiganshire
Westmorland	Essex, Part of[2]	Hampshire	Denbighshire
Yorkshire, North Riding	Hertfordshire, Part of[3]	Oxfordshire	Flintshire
	Huntingdonshire	Wight, Isle of	Merionethshire
REGION II *East and West Ridings*	Norfolk		Montgomeryshire
	Suffolk, East		Pembrokeshire
Yorkshire, East Riding	Suffolk, West	REGION VII *South Western*	Radnorshire
Yorkshire, West Riding		Cornwall	
	REGION V *London and South Eastern*	Devon	REGION IX *Midland*
REGION III *North Midland*		Dorset, Part of[7]	
	Essex, Part of[4]	Gloucestershire	Herefordshire
Derbyshire, Part of[1]	Hertfordshire, Part of[5]	Somerset	Shropshire
Leicestershire	Kent	Wiltshire	Staffordshire
Lincolnshire—	London Admin. County		Warwickshire
Parts of Holland	Middlesex		Worcestershire
Parts of Kesteven	Surrey	REGION VIII *Wales I (South East)*	
Parts of Lindsey	Sussex, East		REGION X *North Western*
Northamptonshire	Sussex, West	Brecknockshire	
Nottinghamshire		Carmarthenshire	Cheshire
Peterborough, Soke of		Glamorganshire	Derbyshire, Part of[8]
Rutland		Monmouthshire	Lancashire

1. All except Buxton M.B., Glossop M.B., New Mills U.D., Whaley Bridge U.D. and Chapel en le Frith R.D.
2. All except East Ham C.B., West Ham C.B., Chingford M.B., Wanstead and Woodford M.B., Leyton M.B., Walthamstow M.B., Ilford M.B., Barking M.B., Dagenham M.B., Waltham Holy Cross U.D. and Chigwell U.D.
3. All except Barnet U.D., Bushey U.D., Cheshunt U.D., East Barnet U.D. and Elstree R.D.
4. All areas stated in 2 above.
5. All areas stated in 3 above.
6. Poole M.B. only.
7. All areas except Poole M.B.
8. All areas stated in 1 above.

7. Conurbations

The conurbation areas each consist of an aggregation of entire local authority areas and are constituted as follows:

Tyneside			
Durham		*Northumberland*	
Gateshead C.B.	Felling U.D.	Newcastle upon Tyne C.B.	Longbottom U.D.
South Shields C.B.	Hebburn U.D.	Tynemouth C.B.	Newburn U.D.
	Jarrow M.B.		Wallsend M.B.
	Whickham U.D.	Gosforth U.D.	Whitley Bay M.B.

West Yorkshire

Yorkshire, West Riding

Bradford C.B.	Aireborough U.D.	Heckmondwike U.D.	Ossett M.B.
Dewsbury C.B.	Baildon U.D.	Holmfirth U.D.	Pudsey M.B.
Halifax C.B.	Batley M.B.	Horbury U.D.	Queensbury and Shelf
Huddersfield C.B.	Bingley U.D.	Horsforth U.D.	U.D.
Leeds C.B.	Brighouse M.B.	Keighley M.B.	Ripponden U.D.
Wakefield C.B.			Rothwell U.D.
	Colne Valley U.D.	Kirkburton U.D.	
	Denby Dale U.D.	Meltham U.D.	Shipley U.D.
	Denholme U.D.	Mirfield U.D.	Sowerby Bridge U.D.
	Elland U.D.	Morley M.B.	Spenborough M.B.
			Stanley U.D.

South East Lancashire

Cheshire	*Lancashire*		
Stockport C.B.	Bolton C.B.	Horwich U.D.	Urmston U.D.
	Bury C.B.	Irlam U.D.	Wardle U.D.
Alderley Edge U.D.	Manchester C.B.	Kearsley U.D.	Westhoughton U.D.
Altrincham M.B.	Oldham C.B.	Lees U.D.	Whitefield U.D.
Bowdon U.D.	Rochdale C.B.	Littleborough U.D. ·	Whitworth U.D.
Bredbury and Romiley	Salford C.B.		Worsley U.D.
U.D.		Little Lever U.D.	
Cheadle and Gatley U.D.	Ashton-under-Lyne M.B.	Middleton M.B.	
Dukinfield M.B.	Audenshaw U.D.	Milnrow U.D.	
Hale U.D.	Chadderton U.D.	Mossley M.B.	
Hazel Grove and Bramhall	Crompton U.D.	Prestwich M.B.	
U.D.	Denton U.D.		
Hyde M.B.		Radcliffe M.B.	
Marple U.D.	Droylsden U.D.	Royton U.D.	
Sale M.B.	Eccles M.B.	Stretford M.B.	
Stalybridge M.B.	Failsworth U.D.	Swinton and Pendlebury	
Wilmslow U.D.	Farnworth M.B.	M.B.	
	Heywood M.B.	Tottington U.D.	
Disley R.D.			

Merseyside

Cheshire		*Lancashire*	
Birkenhead C.B.	Ellesmere Port M.B.	Bootle C.B.	Huyton-with-Roby U.D
Wallasey C.B.	Hoylake U.D.	Liverpool C.B.	Litherland U.D.
	Neston U.D.		
Bebington M.B.	Wirral U.D.	Crosby M.B.	

West Midlands

Staffordshire		*Warwickshire*	*Worcestershire*
Smethwick C.B.	Darlaston U.D.	Birmingham C.B.	Dudley C.B.
Walsall C.B.	Rowley Regis M.B.		
West Bromwich C.B.	Sedgley U.D.	Solihull M.B.	Halesowen M.B.
Wolverhampton C.B.	Tettenhall U.D.	Sutton Coldfield M.B.	Oldbury M.B.
	Tipton M.B.		Stourbridge M.B.
Aldridge U.D.			
Amblecote U.D.	Wednesbury M.B.		
Bilston M.B.	Wednesfield U.D.		
Brierley Hill U.D.	Willenhall U.D.		
Coseley U.D.			

Greater London

London	*Kent*	*Essex*
(whole county)	Beckenham M.B.	East Ham C.B.
	Bexley M.B.	West Ham C.B.
Middlesex	Bromley M.B.	
(whole county)	Chislehurst and Sidcup	Barking M.B.
	U.D.	Chigwell U.D.
Surrey	Crayford U.D.	Chingford M.B.
Croydon C.B.	Erith M.B.	Dagenham M.B.
	Kingston-upon-Thames	Orpington U.D.	Ilford M.B.
	M.B.	Penge U.D.	
Banstead U.D.	Malden and Coombe		Leyton M.B.
Barnes M.B.	M.B.		Waltham Holy Cross
Beddington and Walling-	Merton and Morden	*Hertfordshire*	U.D.
ton M.B.	U.D.	Barnet U.D.	Walthamstow M.B.
Carshalton U.D.	Mitcham M.B.	Bushey U.D.	Wanstead and
		Cheshunt U.D.	Woodford M.B.
Coulsdon and Purley U.D.	Richmond M.B.	East Barnet U.D.	
Epsom and Ewell M.B.	Surbiton M.B.		
Esher U.D.	Sutton and Cheam M.B.	Elstree R.D.	
	Wimbledon M.B.		

8. Urban and rural aggregates

Urban and rural aggregates relate to groups of local authority areas by type (all those within conurbations, urban areas, rural districts) and, in the case of urban areas, by size of enumerated population at the 1951 Census. " Urban areas " include boroughs and urban districts as defined under the Local Government Acts, and rural districts are also as defined by those Acts.

9. Assignment of vital statistics by area

In all tables births and stillbirths are classified according to the area of usual residence of the parents (or mother) and deaths to the area of usual residence of the deceased. Accommodation provided under Parts III and IV of the National Assistance Act, 1948, is regarded as the place of residence of persons dying there. Before 1st January 1958 chronic sick and psychiatric hospitals were similarly treated for this purpose but from that date the method of classification was modified, the main change being that a death in such a hospital is now assigned to the area of occurrence only if the deceased had been there six months or more. If the deceased had been there less than six months the death is transferred to the area of previous usual residence.

10. General

See also the Explanatory Notes to the Tables volumes, Parts I and II.

INTRODUCTION

The Commentary follows the familiar pattern and completes for 1960 the numerical view of life and death set out in tables already published in Parts I and II of the Review.

On this occasion general mortality is considered in its relation to the successive stages of human life, from infancy to old age, and the statistical picture of 1960 is compared with that for 1950. This Commentary also contains the outcome of an analysis of changes in the numbers of deaths and in ages at death from eleven selected causes during the period 1920–1960. There is also a statement, of the kind published periodically, on the additional information obtained in reply to enquiries for further particulars of certified causes of death.

This year saw the introduction of the registration of the causes of stillbirth from the 1st October (Section 2 of the Population (Statistics) Act, 1960). The figures of the three months to December 1960 were published in the *Registrar General's Quarterly Return* for December 1960. Comment on these figures is deferred until the 1961 figures for a full year are available.

In addition to the central record of births, deaths and marriages in England and Wales, the General Register Office gets particulars of these vital events entered in registers kept by British Consuls, H.M. Forces abroad, British High Commissioners, Captains of H.M. Ships, the Masters of British ships (and of foreign ships carrying passengers to or from ports in the United Kingdom) and the Ministry of Aviation. From time to time details of the numbers of births, deaths and marriages registered in this way are given in the Commentary and figures for the years 1951–1960 will be found after the customary report on the Registration Service.

General Register Office,
Somerset House,
London, W.C.2.

August 1962.

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POPULATION

It is estimated that at mid-1960 the *home* population of England and Wales was 45,755,000, the *civilian* population 45,406,000 and the *total* population 45,862,000.

As defined in Explanatory Note 1 on page xi, the *home* estimate comprises all persons actually present in the country, civilian and military, and of whatever nationality. It is an estimate constructed from the last Census prior to the mid-year concerned, with allowance for births, deaths, migration into and out of the country and variation in the disposition of the Armed Forces since the Census was taken. No adjustment is made, however, for the purely temporary seasonal net increase in visitors to this country in the summer months. For internal puposes the home population is the most important of the three estimates given. It serves as the control figure for the local population estimates on which Exchequer grants to local authorities are based and as a basis for the calculation of birth and death rates and other vital statistics. The term *civilian* population is self-explanatory—it is the home figure excluding its Armed Forces content.

Explanatory Note 1 defines our *total* population figure as the home population *plus* members of H.M. Forces serving overseas who are drawn from England and Wales, but *minus* the Forces of other countries temporarily stationed here.

It is easy enough to define the population of a country as the total number of its inhabitants; but there is no single definition of an inhabitant universally acceptable for all statistical purposes. There is a convention that either a *de facto* (or actual) figure or a *de jure* (by right) figure may be given, or both. But apart from the difficulty in making a choice between them, and in spite of special circumstances which may complicate even a true *de facto* count (such as the presence of nomadic groups, pockets of officially unrecognised displaced persons, etc. in a country), the United Nations Population Commission has found so confused and complicated a picture of actual theory and practice that, in the interest of comparability between the statistics of different nations, it recommended the production from each national census around 1950 of total figures on a uniform modified *de facto* basis, whatever other figures were also produced. This recommendation of an " international conventional total " population figure has been repeated for the 1960 round of censuses.

The 1960 United Nations Demographic Yearbook defines the " international conventional total " as " the total number of persons present in the country at the time of the census, *excluding* foreign military, naval and diplomatic personnel and their families located in the country but *including* military, naval and diplomatic personnel of the country and their families located abroad and merchant seamen resident in the country but at sea at the time ".

The *home* population of England and Wales is the simple *de facto* population count. The *total* population of England and Wales is so defined as to suit national requirements; and its development, though not its publication in its present form, long antedates the United Nations discussions and recommenda-

tions. In fact, however, it sufficiently approximates to the recommended " international conventional total " to be identifiable with it for the purposes of international comparability.

The inclusion of merchant seamen at sea is recommended by the U.N. Population Commission, but is not mentioned in Explanatory Note 1. They are excluded from all three of the published estimates for England and Wales. Similarly, the categories referred to above as recommended for exclusion, but which are not mentioned in Explanatory Note 1, are included by us. On the basis of past experience, however, it is possible to assume that these contrasting groups are in rough balance.

Table I.   Estimated population mid-1951 to mid-1960, England and Wales

(Figures in thousands)

	Total			Home			Civilian		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1951	44,007	21,233	22,774	43,815	21,044	22,771	43,284	20,530	22,754
1952	44,166	21,320	22,846	43,955	21,110	22,845	43,402	20,576	22,826
1953	44,301	21,397	22,904	44,109	21,206	22,903	43,541	20,658	22,883
1954	44,480	21,492	22,988	44,274	21,288	22,986	43,742	20,774	22,968
1955	44,623	21,569	23,054	44,441	21,389	23,052	43,916	20,879	23,037
1956	44,821	21,669	23,152	44,667	21,517	23,150	44,151	21,013	23,138
1957	45,043	21,782	23,261	44,907	21,648	23,259	44,425	21,177	23,248
1958	45,244	21,877	23,367	45,109	21,744	23,365	44,701	21,346	23,355
1959	45,504	22,002	23,502	45,386	21,885	23,501	45,007	21,517	23,490
1960	45,862	22,176	23,686	45,755	22,070	23,685	45,406	21,733	23,673

From Table I above it will be seen that at no time during the period covered would the use of the total population involve the addition of as much as a half of one per cent to the home population and that recently the difference has been narrowing until by mid-1960 the addition required was less than a quarter of one per cent of the home population.

On the basis of the *de facto* or home population, the number of persons in England and Wales increased between 1951 and 1960 by 1,940,000 or nearly 4·4 per cent, the annual increases averaging 216,000, but ranging from 140,000 to 369,000.

In the 1959 Commentary it was pointed out that population growth from 1951–59 showed no marked variation from the pattern for 1931–39 and 1921–29. If the current review had been written before any information had become available about population increase after mid-1960, it would still be permissible merely to emphasise the persistence of this similarity into 1960. There is some difficulty in bringing 1939–40, with its unusual circumstances, into comparison with 1929–30 or 1959–60. Nevertheless, it is safe to claim that in each of the nine-year periods from mid-1921, mid-1931 and mid-1951 respectively the increase in population was remarkably similar, about four and a half per cent of the starting figure. And even with information available beyond the end of 1960, it would not be possible to refute a claim that the definite new pattern of population change observable since about 1911 against the following background was still operative in 1960.

3

During the Victorian and Edwardian periods, the population of England and Wales increased by more than 20 million people, having doubled itself in a little more than half a century. From some 15 millions in 1837, it rose to over 32 millions by the end of the nineteenth century and was nearly 36 millions by 1910. This represented an average annual increase of some 288,000 spread over the 73 years; but over the last forty of them the annual increments had persisted at about 300,000 and from the eighteen nineties an annual rate of around 350,000 was maintained.

If it is preferred that the comparison should simply be made with the half-century prior to 1911, the change in pattern from then on is very clear. From the 1861 Census to that of 1911, the home population of England and Wales rose by 16 millions or 80 per cent, the increases averaging over 320,000 a year.

The preliminary results of the 1961 Census (published in June 1961) show the very different picture for the second half of the century covered—an increase of 10 millions or 28 per cent, the increases averaging 200,000 a year. For the most part they were well below that figure.

In spite of such encouragement to leave well alone and the many warnings of past experience against overestimating the importance of short-term variations in changing long-term patterns, there is an alternative possible interpretation of the population changes between mid-1951 and mid-1960 which the later figures impel us to examine.

This is that a quite different pattern of population increases from that persisting since 1911 or thereabouts began to emerge in the middle 'fifties. At first haltingly and with a brief recoil, the change accelerated from about 1958; and 1960 would prove to be as memorable a year as 1911, the beginning of a change from annual increases levelling out at under 200,000 a year for about forty-five years by rapid shift to twice that level.

The nine annual increases from mid-1951 by themselves offer little support for such a conclusion, even if the changes in total as well as home population are given, showing that such increased changes as there were do not merely reflect the narrowing of the gap between these two, a feature which would be irrelevant to the long-term pattern of change. The increments from mid-1951 are (*in thousands*):

	1951–52	1952–53	1953–54	1954–55	1955–56	1956–57	1957–58	1958–59	1959–60
Home..	140	154	165	167	226	240	202	277	369
Total ..	159	135	179	143	198	222	201	260	358

There is nothing untoward in a series of nine increases of which four are well below 200,000 and only two adjacent ones uncomfortably above. Since 1911 there have been previous examples of isolated instances or brief runs of high figures, followed by a return to the normal pattern and we had a return to normal as recently as 1957–58.

4

There are, however, three points which should be made about the later figures in the sequence. The first is that if we take for 1960 assessment the longer period from mid-1959 to the preliminary figures for the 1961 Census, we get an annual rate of 378,000 instead of the mid-1959 to mid-1960 figure of 369,000, while the shorter period from mid-1960 to the 1961 Census yields an annual rate of increase of 390,000.

The second is that on previous experience we could confidently expect the high level of births in the immediate post-war period to revert to a lower level. We have no such confidence as to change in the present high level. While we can pinpoint the various other reasons for the increased size of our population change as we could those for earlier variations in the pattern, it was usually possible to forecast with confidence their temporary impact, e.g. we knew the intake of Hungarian refugees would not persist at a constant or increasing level and that many would pass on elsewhere. The third point then is that we do not know enough about the likely impact of legislation or the economic situation on the recently increasing importance of net inward migration as a factor in population change to justify any forecast that 1960 will appear to have been merely the first year when the movement towards a greatly increased long-term level of population change became obvious. It is plain that the 1959 and 1960 increases were part of a gradient whose ultimate extent is not yet known, but which would certainly require some unprecedented reversal to restore the 200,000 level of earlier years. Judgment on the long-term significance of the very recent increases in population which by 1960 were obviously not extremely short-term can be suspended.

Births

The most important element in the annual population increment has been and still is the number of live births occurring during the year, and the change in the pace of population growth reflected a change in the flow of births. The significance of 1911 in establishing a change in the pattern of population growth emerges from the list of yearly averages, which shows (*in thousands*):

1841–50 ..	..	..	..	549	1901–10	..	..	..	930
1851–60 ..	..	..	..	647	1911–20	..	..	..	810
1861–70 ..	..	..	..	750	1921–30	..	..	..	713
1871–80 ..	..	..	..	859	1931–40	..	..	..	606
1881–90 ..	..	..	..	889	1941–50	..	..	..	725
1891–1900	..	..	..	916	1951–60	..	..	..	704

In fact the decline in births began soon after the end of the nineteenth century and rapidly gathered momentum. It was not arrested until the nineteen thirties. In 1933 there were as few as 580,000 live births. A slow rise brought the annual figure up to 621,000 in 1938. After the 1939–45 War there was (as there had been after the 1914–18 War) a sharp upward fluctuation in births, mainly due to " postponed births ". After 1950 the flow seemed to have settled down to some 670,000 or so births a year.

But in 1955 the flow was accelerated and, beginning with 1956, the births each year have been (*in thousands*): 700, 723, 741, 749 and, in 1960, 785. The larger figures of population growth since 1955, given above, reflect this increase in births.

Table II. Natural increase of the population mid-1951 to mid-1960, England and Wales

Year ended 30th June		Births			Deaths			Natural increase		
		Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1952 ..	..	669,195	343,708	325,487	484,136	250,310	233,826	185,059	93,398	91,661
1953 ..	..	679,757	349,569	330,188	521,161	269,141	252,020	158,596	80,428	78,168
1954 ..	..	680,794	349,788	331,006	487,860	252,565	235,295	192,934	97,223	95,711
1955 ..	..	665,190	342,175	323,015	524,446	269,795	254,651	140,744	72,380	68,364
1956 ..	..	687,214	354,082	333,132	516,340	266,001	250,339	170,874	88,081	82,793
1957 ..	..	709,658	364,569	345,089	483,659	248,948	234,711	225,999	115,621	110,378
1958 ..	..	732,751	377,142	355,609	549,955	284,054	265,901	182,796	93,088	89,708
1959 ..	..	749,059	385,391	363,668	536,131	274,680	261,451	212,928	110,711	102,217
1960 ..	..	759,184	390,907	368,277	503,974	257,668	246,306	255,210	133,239	121,971

Table II above sets out the figures making up the natural increase (excess of births over deaths) from mid-1951 to mid-1960. The " bulge " years of 1946 and 1947 (there were 821,000 and 881,000 births respectively in these two calendar years) were followed by a steady decline to a figure still higher than that persisting in the nineteen thirties. As already indicated, births have increased in number since 1955 and in mid-year to mid-year terms reached 733,000 in 1957–58, 749,000 in 1958–59, and 759,000 in 1959–60.

Deaths

Deaths fluctuate from year to year independently of the movement in births, reflecting the irregular incidence of epidemics of influenza and similar events. In the nine years shown in Table II, the average number of deaths a year was 512 thousand, ranging from 484,000 in 1951–52 and 1956–57 to 550,000 in 1957–58.

Although births offset by deaths led in one of the nine years under review to a natural increase as low as 141,000 (in 1954–55), the average annual natural increase from mid-1951 to mid-1960 was 192,000. The figure of excess of births over deaths exceeded 200,000 three times, all in the four years since mid-1956, and reached 255,000 in 1959–60.

Migration

The other factors in population change are conveniently summarised into a simple net figure of migration; but what is here being measured is the balance between two opposing movements of a complex character. Table III below gives not only the final balance but also two separate constituents. It is necessary to explain the meaning of " migration " in this context. For the sake of greater comparability, international conventional use distinguishes between the long term or " permanent " migrant (a person whose movement to or from a country is expected to persist for at least one year) and the " short term migrant " or temporary visitor. For the estimation of population growth it is necessary to measure all long-term and some short-term migration. A *de facto* Census count will include visitors to a country and exclude residents who are away from it at the time. The following Census will reflect not only the natural change and long-term migration to and from the country in the intervening period; but it will also cover any change in the difference between the number of temporary visitors to this country and the number of residents of England and Wales who

are temporarily abroad. Intervening estimates attempt a similar assessment of such changes. To estimate the relatively small change in the " visitor " pool from the enormous passenger movement across the boundaries of England and Wales is a matter of some difficulty. Although the provisional results of the 1961 Census suggest that this was successfully surmounted over the intercensal period as a whole, the same accuracy may not obtain for each of the ten mid-year estimates of migration individually. There is, however, no evidence that it does not.

Table III. Migration, mid-1951 to mid-1960, to and from England and Wales
(*Figures in thousands*)

Year ended 30th June	Net overseas migration			Net migration within United Kingdom			Total net migration		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1952	− 45*	− 17	− 28	+ 19	+ 11	+ 8	− 26	− 6	− 20
1953	− 42	− 15	− 27	+ 18	+ 11	+ 7	− 24	− 4	− 20
1954	− 30	− 11	− 19	+ 13	+ 8	+ 5	− 17	− 3	− 14
1955	− 15	− 6	− 9	+ 20	+ 12	+ 8	+ 5	+ 6	− 1
1956	—	− 2	+ 2	+ 25	+ 13	+ 12	+ 25	+ 11	+ 14
1957	− 20	− 13	+ 7	+ 20	+ 12	+ 8	—	− 1	+ 1
1958	− 5	− 11	+ 6	+ 19	+ 11	+ 8	+ 14	—	+ 14
1959	+ 30	+ 4	+ 26	+ 18	+ 11	+ 7	+ 48	+ 15	+ 33
1960	+ 84	+ 30	+ 54	+ 24	+ 14	+ 10	+108	+ 44	+ 64

* Including Allied Forces discharged between mid-1951 and mid-1952.

Table III distinguishes between net migration between England and Wales and the rest of the United Kingdom and net movement between this country and countries outside the United Kingdom. The first is an acknowledgment that in many respects the United Kingdom is a single entity and that this element in the migration balance is a movement much more akin to that between one region of the country and another than, say, emigration from Italy to Wales or from London to Brazil. The result over the nine years to mid-1960 was a net gain to the population of England and Wales of some 176,000 from the rest of the United Kingdom.

One established element in the migration balance is the net annual increase from the Irish Republic. The growth of industrial development in the Republic might have been expected to curtail the availability of Irish immigrant workers; but in fact the inward flow of workers has increased in recent years. There is, however, much movement to and fro and some difficulty in assessing the resultant net annual addition to the population of this country. Over the nine years, however, it amounted to slightly over 250,000, and increased latterly until it was 35,000 a year in 1958–59 and 1959–60. The Republic of Ireland Census, 1961, has removed any serious doubt as to the accuracy of these estimates.

The total migration balance apart from that from Scotland or Ireland is the difference between two complex groupings. One includes English and Welsh

emigrants beyond the United Kingdom and the Irish Republic, any former Commonwealth or alien immigrants here who return home or move on to another country, and the change in the level of residents in this country temporarily away from it. The other and contrasted grouping includes Commonwealth and alien immigrants to this country, former emigrants returning to England and Wales and the change in the level of overseas visitors here (including, for example, U.S. Forces stationed here and their dependants).

Traditionally the first grouping has usually exceeded the other by more than net immigration here from the Irish Republic and net movement into England and Wales from the rest of the United Kingdom. Recent figures had indicated that for the present the trend had been reversed: immigration from overseas has been in excess of emigration. It was only in 1960, however, that the potential scale of the changeover, from population increases less than the " natural increase " to population increases exceeding the " natural increase " (in fact, more than double four of the nine natural increases in Table II), began to be plain. In the single year 1959–60 the net balance of migration exceeded those of the five years since the trend began. The main factor was the very large increase in the number of overseas Commonwealth citizens coming to England and Wales. Requests to split the 108,000 net addition by migration to the population of England and Wales in 1959–60 into its Scottish, Irish, alien and overseas Commonwealth components suggest a need to stress that the net addition of these elements in our population in that year do not add up to 108,000 but to a much higher figure which is offset (to 108,000) by the net outward movement of English and Welsh. The method of estimating net migration (blunted by lack of detailed statistics but confirmed as to its overall accuracy over the ten intercensal years) does not lend itself to identifying components in this complex movement with any great confidence in the accuracy of each item; but it is plain that there were over 100,000 more overseas Commonwealth citizens in England and Wales at mid-1960 than at mid-1959. In addition to those settling here, this includes, of course, any increase in the pool of visitors who would be counted in a Census at any off-peak period for tourism.

Changes in population structure

The trend of changes in the sex, marital condition and age structure of the population was discussed at length in the 1956 Commentary (pages 6–8). It would clearly be worth while waiting for the detailed results of the 1961 Census before examining the matter in detail again. Although the difficulty in determining the *numbers* to be used on either side of the migration balance sheet has been surmounted, the sex and age structure of the net outward or inward balance has to rely on some evidence for all aliens and complete evidence only for those (aliens and others) travelling by the Long Sea Routes direct to United Kingdom ports, a continually declining proportion of all migrants. Since 1960 there has been some improvement in our knowledge. The provisional results of the count of enumerators' summaries at the 1961 Census suggested that the proportion of females to males at all ages had fallen to 1,066 : 1,000 by then, indicating that earlier assumptions about the sex proportions of migrants were not borne out. This will modify the reliability of the best estimates we are able to make until fuller information is available. With that proviso, the situation may be summarised as follows.

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Sex ratios

About 106 boys are born for every 100 girls; but the death rates for males are higher than those for females at all ages, so that the number of males per thousand females at mid-1960 falls from 1,054 at ages 0–4 to almost balance in the age-group 30–34, down to 790 at ages 60–64, and only 542 at ages 75 and over (twice as many women as men). The reduction in mortality at younger ages has narrowed the differential between the two sexes and postponed the age-group in which the excess of males at birth is countered by excess male mortality from 5–9 in 1911 to 30–34 in 1960. At older ages the death rates for males have fallen much less than those for females, and consequently the excess of females at these ages has been increasing. At the 1911 Census there were 757 men for every 1,000 women at ages 65 and over; in 1960 the figure was 627.

Age structure

We have already emphasised the remarkable reduction in the number of births which distinguishes the last half-century from the Victorian and Edwardian eras. One result has been a change in the proportion of young to old in the population. At the 1911 Census children under 15 constituted 30·6 per cent of the entire population, while only 5·2 per cent were over 65. The population aged 15–64 amounted therefore to 64·2 per cent of the whole. At mid-1960 the under-fifteens had fallen to 22·8 but those who had passed their 65th birthday made up 11·9 per cent, the group 15–64 being 65·3 per cent of the whole.

There are many and complex consequences of the increase in the number of older people in the community. Many of these arouse widespread interest. An impressive illustration of the effects of fluctuations in the number of births has been provided by the passage of the post-war births " bulge " (which reached its peak with the 881,000 live births in 1947) through the primary and then the secondary education system and its more recent entry into the labour market. The high birth rate in the later years of the nineteenth and earliest of the twentieth centuries represents another " bulge " (spread over a longer period and therefore over a wider age span) which has passed up into older age-groups and has increased the proportion of elderly persons in the population, in spite of having borne the brunt of the loss of life in the 1914–18 War. The resultant effect on the dependency of one sector of the population on another is sometimes illustrated by mere comparison of the " working " and " retired " age-groups (15–64 and 65 and over) or the " National Health Insurance population " (men 15–64; women 15–59) and those beyond these ages. While accepting with necessary qualifications the validity of comparisons between the insured sector (or, if preferred, the 15–64 sector) with the rest of the total de facto or home population, a shorter-term view of the changing picture may overlook one important point which emerges from available figures. The ratio, present and forecast, of the total number of children and old people together (0–15 and 65 and over) to the population as a whole since the 1931 Census has certainly increased. But comparison with the 1911 Census situation shows that this increase—especially that of the elderly component—is a " growing up " process after the population had been rendered unduly youthful by the very large number of births in the later Victorian and immediately subsequent years. The increase therefore represents a stage in the restoration of a more normal age structure.

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In 1911 children and old people together amounted to nearly 36 per cent of the entire population (30·6 per cent 0–14; 5·2 per cent 65 and over). In 1931 they were 31 per cent (23·8 per cent 0–14; 7·4 per cent 65 and over). By mid-1960 the proportion had risen to nearly 35 per cent (22·8 per cent 0–14; 11·9 per cent 65 and over). It is estimated that while the proportion will reach 37·4 per cent in 1975 and 38·2 per cent in 1980, it will thereafter revert to about 37 per cent (23·8 per cent 0–14; 13·3 per cent 65 and over) by the end of the twentieth century. Measured in these terms, the economic pressure of dependency has not varied very much and is not substantially greater now than in 1911. But, as part of the " growing up " referred to above, the elderly component has increased to more normal proportions.

Marital condition

Table IV. Proportion married per 1,000 in each age-group, 1931, 1951 and 1960, England and Wales

Age	Males			Females		
	1931 (census)	1951 (census)	1960 (estimate)	1931 (census)	1951 (census)	1960 (estimate)
15–24	70	125	151	140	272	314
25–34	640	720	773	658	798	868
35–44	855	862	871	752	820	871
45–54	847	877	885	720	759	801
55–64	795	850	863	619	624	662
65 and over ..	619	664	695	341	352	341

From Table IV above it will be seen that as a result of the maintenance of relatively high marriage rates generally, and in particular of an increase in the number of marriages at young ages, the married proportion to the rest has increased in all age-groups except for the oldest group of females. In the drop after the early fifties the high incidence of the termination of marriages by death is obviously the significant factor. In the youngest age-group of all the proportion married has more than doubled for both men and women since 1931.

Future prospects

The difficulty of determining whether fluctuations are fortuitous, or indicative of a short-term variation in the established pattern which will peter out with little long-term effect on it, or the beginning of a new trend that will henceforward be steadily maintained or even accelerate slowly or rapidly, does not lessen the need at any one time for the best forecasting possible within the limits of available data. There is a wide field of government, industrial and commercial activity where decisions must take account of long-term population trends.

The assumptions about future fertility, mortality and migration underlying the proportions of Table A5 in Part II of the 1960 *Statistical Review* are under continuous review and revisions are made as often as any change in current conditions appear to warrant them.

On the stated assumptions underlying the projections from mid-1960 (and revised assumptions would lead to different forecasts unless self corrective), the total population will have risen from mid-1960 by 4,560,000 at mid-1980, i.e., from 45,862,000 to 50,422,000, an average annual increase spread over twenty years of 228,000. By mid-2000, with the total population at over 55,000,000, there will be a further addition of nearly 5 millions. It will have maintained a long-term pattern of increase ironing out at perhaps 235,000 a year on average over the last forty years of the twentieth century. The proportion of those under 15 in relation to total population will have risen slightly from 22·8 per cent to 23·4 per cent by 1980 and to 23·8 per cent by the year 2000. Those aged 65 and over, who constitute 11·9 per cent in 1960, will form 14·7 per cent by mid-1980, with a slight fall to 13·3 per cent of the total population by the year 2000.

Men in the working age-group 15–64 (14,710,000 in 1960) will have increased in number to 15,640,000 by mid-1980 and to 17,776,000 by mid-2000. Nevertheless, they will constitute only 31·0 per cent of the 1980 population, compared with 32·1 per cent in 1960. In the year 2000 this proportion will be 31·9 per cent.

MARRIAGES

During 1960 there were 343,614 marriages in England and Wales which was 3,488 more than in 1959. The marriage rates per 1,000 total population and per 1,000 unmarried population aged 15 and over rose slightly between 1959 and 1960. The marriage rate per 1,000 unmarried females aged 15–39, an age-group which accounts for about 90 per cent of all marriages, also rose slightly compared with 1959 as did the corresponding rate for unmarried males aged 20–44.

Table V.   Numbers of marriages and marriage rates, 1931 and 1938 to 1960, England and Wales

Period			Marriages	Per 1,000 total population	Per 1,000 unmarried population			
					Males aged 15 and over	Females aged 15 and over	Males aged 20–44	Females aged 15–39
1931	..	..	311,847	15·6	53·4	41·6	106·4	68·6
1938	..	..	361,768	17·6	61·2	47·8	124·5	85·5
1939–50*	..	..	381,910	17·9	68·2	53·0	139·7	106·2
1951–55*	..	..	350,916	15·8	68·3	51·4	126·0	121·4
1956	..	..	352,944	15·7	70·7	52·9	157·0	131·7
1957	..	..	346,903	15·4	70·1	52·4	157·8	132·3
1958	..	..	339,913	15·0	68·8	51·3	157·2	130·3
1959	..	..	340,126	14·9	68·5	51·2	158·9	129·3
1960	..	..	343,614	15·0	68·8	51·6	163·6	130·9

* Annual averages.

Among the 343,614 marriages celebrated in 1960, 290,887 were between bachelors and spinsters, comprising 85 per cent of the total. A further 10 per cent of all marriages were those where one partner was marrying for the first time but the other was remarrying. In the remaining marriages both partners were remarrying.

First marriages

Bachelors

Among the men who married during 1960, 305,775 (89 per cent) were bachelors, of whom 95 per cent married spinsters. Among the bachelors who did not marry spinsters nearly twice as many married divorced women as married widows.

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Table VI. Proportional distribution of first marriages by age-group per 1,000 at all ages, and average age at marriage, 1931 and 1938 to 1960, England and Wales

Period	Age at marriage								Average age at marriage
	15–	20–	25–	30–	35–	45–	55 and over	Not stated	
BACHELORS									
1931 ..	19	371	410	122	55	14	6	3	27·30
1938 ..	17	339	413	146	64	13	5	3	27·72
1939–50 ..	29	421	333	122	71	15	5	4	27·06
1951–55 ..	31	478	304	104	59	17	5	2	26·55
1956 ..	43	502	286	93	53	17	5	1	26·15
1957 ..	49	508	279	90	53	15	5	1	26·03
1958 ..	56	520	268	84	51	15	5	1	25·86
1959 ..	57	529	261	83	50	14	5	1	25·77
1960 ..	59	534	258	79	49	14	6	1	25·68
SPINSTERS									
1931 ..	98	480	283	78	41	11	4	5	25·47
1938 ..	112	460	278	86	45	11	4	4	25·58
1939–50 ..	156	504	201	67	48	14	5	5	24·75
1951–55 ..	186	537	161	54	38	16	6	2	24·18
1956 ..	225	530	142	47	33	15	6	2	23·73
1957 ..	237	529	134	45	33	14	6	2	23·60
1958 ..	250	527	128	42	31	14	6	2	23·46
1959 ..	252	534	121	41	30	13	7	2	23·37
1960 ..	264	529	117	40	30	13	6	1	23·26

Table VII. First marriage rates by sex and age with ratios to those of 1938 taken as 100: 1931 and 1938 to 1960, England and Wales

The ratios were calculated before rounding off the rates

Marriage rate per 1,000 population over 15	Annual marriage rates per 1,000 in each age-group							Period	Ratios of rates to those of 1938 taken as 100							
	15–	20–	25–	30–	35–	45–	55 and over		15–	20–	25–	30–	35–	45–	55 and over	All ages*
BACHELORS																
56·0	3·3	72·3	152·2	111·5	49·8	16·4	5·4	1931	100	83	86	87	87	89	114	86
64·8	3·2	87·0	176·8	127·5	57·0	18·5	4·8	1938	100	100	100	100	100	100	100	100
71·2	6·4	112·1	175·6	128·3	61·2	20·8	5·1	1939–50	198	129	99	101	107	113	107	113
70·8	6·7	132·1	172·5	107·7	49·1	18·2	5·1	1951–55	205	152	98	84	86	99	107	117
74·7	9·4	149·6	187·6	108·8	47·5	17·3	4·9	1956	291	172	106	85	83	94	103	128
74·3	10·6	151·4	186·9	109·4	46·8	16·5	4·9	1957	326	174	106	86	82	89	102	129
73·3	11·7	152·5	184·3	105·2	44·9	16·3	4·9	1958	360	175	104	82	79	88	102	130
72·7	11·5	154·1	187·6	104·9	44·5	15·9	4·8	1959	354	177	106	82	78	86	100	130
73·0	11·7	157·8	190·9	105·1	44·6	15·8	4·8	1960	359	181	108	82	78	86	101	137
SPINSTERS																
51·7	17·1	106·8	119·1	57·2	21·3	7·9	2·2	1931	76	72	77	85	83	92	108	76
61·4	22·6	147·9	154·0	67·2	25·7	8·6	2·0	1938	100	100	100	100	100	100	100	100
69·5	36·8	191·1	153·3	72·8	28·9	10·2	2·0	1939–50	163	129	100	108	112	119	100	123
72·0	43·9	232·3	156·5	75·3	29·5	10·4	2·1	1951–55	195	157	102	112	115	122	103	143
77·3	54·4	261·0	169·9	79·9	30·9	10·4	2·1	1956	241	176	110	119	120	121	104	163
77·6	56·6	265·0	168·0	81·3	30·5	10·1	2·1	1957	251	180	109	121	120	118	104	166
76·9	57·8	264·0	168·1	79·3	30·5	10·0	2·1	1958	256	179	109	118	119	117	105	167
76·8	56·5	265·4	171·2	82·2	30·4	9·9	2·3	1959	251	179	111	122	118	115	112	168
77·9	57·7	267·8	172·7	86·6	31·6	10·4	2·2	1960	256	181	112	129	123	122	108	175

* Age-standardised.

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The proportional age distribution of both bachelors and spinsters and their average ages at marriage are shown in Table VI for 1960 with similar figures for earlier years. The average age of bachelor bridegrooms was 25·7 years, slightly lower than in 1959. The gradual reduction in the average age of bachelor bridegrooms in recent years has persisted. Reference to Table L of Part II shows that the average age for bachelors who marry spinsters is 25·1 years; this also is in line with the declining trend of recent years. The average age at marriage for bachelors marrying widows (41·3 years) and the average age at marriage for bachelors marrying divorced women (33·9 years) differ little from the 1959 figure.

The reduction in the age at marriage shows more clearly in the proportional distribution by age of bachelor bridegrooms. Since the period before the Second World War the proportion of bachelor bridegrooms at ages 20–24 has risen from just over a third to over a half, while the proportion of bachelor bridegrooms aged 25–29 has fallen from just over 40 per cent to just over a quarter. The same tendency to younger age at marriage is demonstrated by the age-group marriage rates shown in Table VII. This table shows a striking increase in the marriage rates of bachelors under the age of 25 and particularly under the age of 20, while the rates for ages 30–54 have tended to fall. The rates for 1960 are slightly above the corresponding rates for 1959 apart from marriages at ages 45 and over. The bachelor marriage rate for all ages over 15 combined rose a little compared with 1959. The equivalent ratio roughly standardised for age (that is the ratio of the actual rate for all ages over 15 shown in the first column of Table VII to the rate which would have resulted if the 1938 age rates had been in operation) was higher in 1960 than in 1959 owing to the greater weight given to young marriages in this ratio.

The rates in Table VII for ages under 30 for 1956–59 differ slightly from those already published for those years, due to revision of the estimates of the population by sex, age and marital condition on which they are based for the years in question.

Spinsters

Spinster brides formed 90 per cent of all women who married in 1960. Of all spinster brides 94 per cent married bachelors, the remainder being divided between those who married widowers and those who married divorced men in a ratio of 4 to 6. The average age of spinster brides was 23·3 years, 2·4 years younger than the average age of bachelor bridegrooms. In those marriages where spinsters married bachelors the average age of the bride was 22·5 years, 2·6 years younger than the average age of her husband. All this is part of the downward trend in marriage ages. There are exceptions in special groups. The mean age of spinsters marrying widowers, at 43·2 years, is tending to rise (as is also the average age of bachelors marrying widows), while the average age for spinsters marrying divorced men, at 30·4 years, remains fairly constant.

The reduction in the age at marriage since before the Second World War is even more marked for spinsters than for bachelors. More than a quarter of spinster brides in 1960 were under 20 years of age compared with 10 per cent in 1931 and 11 per cent in 1938. This period has also seen a steady decline in the proportion of spinster brides aged 25–29 corresponding to the rise in the proportion under 20. In contrast to the experience of bachelors, Table VII and Diagram 1 show that since before the Second World War marriage rates

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of women have risen at all ages. This rise has been proportionately much greater at the youngest ages. Compared with 1959, the 1960 rates have risen slightly at all ages under 55. The spinster marriage rate per 1,000 single women over the age of 15 rose a little compared with 1959 and the age standardised ratio (already described) rose from 168 to 175 as compared with a rise of only one point in each of the two preceding years.

Diagram 1
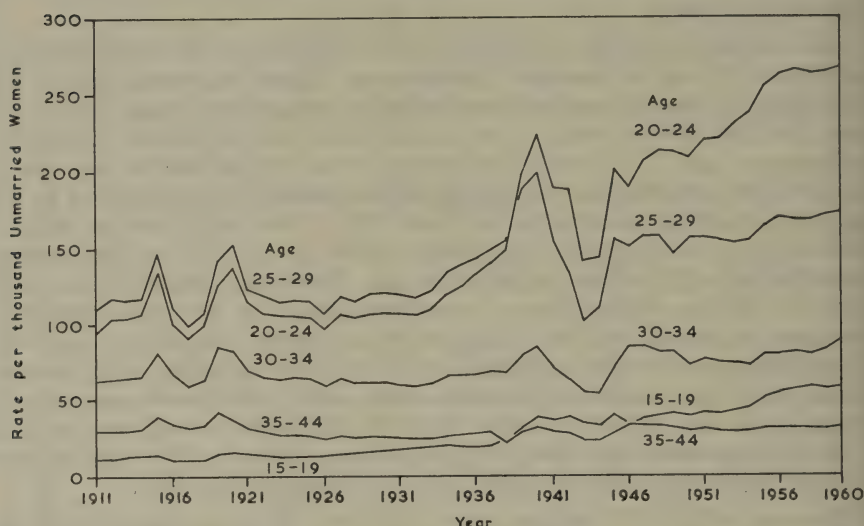
Marriage rates* of women by age, 1911 to 1960, England and Wales

Minors

During 1960 there were 40,160 marriages in which the bridegroom was aged under 21 and 125,096 where the bride was aged under 21. These numbers correspond with 37,401 and 120,838 respectively in 1959. Among the brides under 21 years of age 18,387 were aged 16 or 17 and 25,827 were 18 years old. Brides marrying under 21 outnumbered bridegrooms under that age by just over three to one, this ratio having fallen from nearly five to one in 1938 and over four to one in 1954.

The bridegroom was a minor in 11·7 per cent of all marriages in 1960 compared with 11·0 per cent in 1959 and 6·9 per cent in 1954. More than a third (36·4 per cent) of all 1960 brides were minors. This was similar to the proportion of brides who were under 21 in 1959. The proportion has risen from 28·6 per cent in 1954. These increases illustrate in another way the general tendency to younger age at marriage.

There were 32,884 marriages where both the bride and the bridegroom were under the age of 21. This represents 9·6 per cent of all marriages and constitutes just over a quarter of all the marriages where the bride was a minor.

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* 1911–37: all marriages per 1,000 spinsters, widows and divorced women. 1938–60: first marriages per 1,000 spinsters.

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Remarriages

During 1960 there were 37,839 men who remarried, of whom 19,366 were widowers and 18,473 were divorced men; 34,141 women remarried, 16,412 being widows and 17,729 divorced women. Combined remarriage rates for both widowed and divorced men and women are shown in Table VIII for 1960 and also for earlier periods from 1931. The remarriage rate per 1,000 population over 15 and the equivalent ratio roughly standardised for age (already discussed in the section dealing with first marriages) were both higher for men in 1960 than they were in 1959 but were lower for women. All the age rates for men rose except that for the 35–44 age-group and for women all the age rates rose. The rates for the 20–24 age-group for both men and women are subject to considerable fluctuations which arise from the small numbers at risk.

Widowed persons

Among the 19,366 widowers who remarried during 1960, nine in every twenty married widows, nearly eight in twenty married spinsters and three in twenty married divorced women. A similar classification of the widows who remarried in 1960 shows that nearly eleven in every twenty married widowers, six in twenty married bachelors and three in twenty married divorced men. These proportions are similar to those which have obtained during recent years. For the last thirty years a higher proportion of widowers have married spinsters than widows have married bachelors, although the former proportion has fallen from over 60 per cent between 1926 and 1940 to the current level of about 40 per cent. The proportion of widows who marry bachelors has fallen since 1950 from just under a half to the current level of about 30 per cent. A large part of the decline in the proportion of widowed persons who marry spinsters and bachelors corresponds to the rise in the proportion who marry divorced persons but there has also been a slow rise in the proportion of widowed persons who intermarry.

The proportional age distributions of widowers and widows who remarried in 1960 and also during selected periods since 1891–95 are shown in Table IX.

In 1960 just over two-fifths of the widowers who remarried were over 60 years of age. This compares with a proportion of a quarter for widows. It is clear from Table IX that the widows who remarried in 1960 had a younger age distribution than the widowers and Table L in Part II shows that the average age at remarriage for widowers was 57 years compared with 51 for widows. This age difference of six years is greater than the average difference in age at marriage of spinsters and bachelors. This is generally to be expected as the women at risk of marriage to a relatively old widower will tend to be younger than he is, i.e. there are more younger than older women to choose from. The older the widower the greater the possible difference in age between him and his partner.

Over the period shown in Table IX the age at remarriage of widowed persons has risen as a result of the improvement in mortality conditions over the last 70 years which has increased the mean age of widowhood. In 1891–95, over half the widowers who remarried were under 45 years of age compared with 16 per cent in 1960. At the other end of the scale, only 5 per cent were aged 65 and over in 1891–95 compared with more than a quarter in 1960. A similar change can also be seen for widows. The increased proportions of remarriages at relatively young ages in 1916–20, 1921–25, 1941–45 and 1946–50, as shown in Table IX, reflect the higher mortality (and higher widowhood) during the two world wars.

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Table VIII. Remarriage rates by sex and age with ratios to those of 1938 taken as 100 :
1931, and 1938 to 1960, England and Wales

The ratios were calculated before rounding off the rates

Marriage rate per 1,000 population over 15	Annual marriage rate per 1,000 in each age-group						Period	Ratio of rates to those of 1938 taken as 100						
	20–*	25–	30–	35–	45–	55 and over		20–*	25–	30–	35–	45–	55 and over	All ages†
WIDOWERS AND DIVORCED MEN														
35·8	139·2	172·7	189·2	133·5	67·6	14·9	1931	91	99	76	87	85	94	88
38·1	153·6	174·5	248·0	152·6	79·1	15·9	1938	100	100	100	100	100	100	100
50·5	217·6	425·9	338·1	214·8	106·0	17·6	1939–50	142	244	136	141	134	111	133
55·2	133·7	406·8	318·8	206·4	117·2	19·7	1951–55	87	233	129	135	148	124	137
50·5	310·7	322·3	262·8	168·8	109·7	20·1	1956	202	185	106	111	139	126	123
48·4	317·9	324·4	255·9	157·6	105·3	20·1	1957	207	186	103	103	133	126	119
45·8	423·0	337·9	253·2	146·1	98·5	19·6	1958	275	194	102	96	125	123	113
46·7	503·2	349·2	257·5	145·2	97·9	20·8	1959	328	200	104	95	124	131	116
47·3	504·4	363·9	276·8	142·9	99·7	21·1	1960	328	209	112	94	126	132	121
WIDOWS AND DIVORCED WOMEN														
9·8	128·2	138·8	94·1	36·5	14·1	2·2	1931	65	81	82	73	96	89	82
10·2	197·1	172·4	114·2	50·1	14·7	2·5	1938	100	100	100	100	100	100	100
15·7	294·0	308·6	170·3	73·0	21·6	2·7	1939–50	149	179	149	146	146	109	145
16·1	403·0	355·6	188·2	84·2	29·3	3·0	1951–55	204	206	165	168	199	122	168
14·4	382·4	361·6	196·1	80·5	29·7	3·0	1956	194	210	172	161	201	122	172
13·6	402·8	346·1	186·3	77·6	29·9	3·0	1957	204	201	163	155	203	121	170
12·6	457·2	325·6	210·8	73·2	28·3	3·0	1958	232	189	185	146	192	120	163
12·8	453·5	326·1	212·5	79·1	29·9	3·0	1959	230	189	186	158	203	122	172
12·7	458·4	337·3	222·6	80·4	30·1	3·2	1960	233	196	195	160	204	128	170

* Based on small numbers.
† Age-standardised.

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Table IX. Proportional age distribution at remarriage of widowed persons, 1891 to 1960, England and Wales

Age of widowers											Period	Age of widows										
Under 25	25–	30–	35–	40–	45–	50–	55–	60–	65 and over	Not stated		Under 25	25–	30–	35–	40–	45–	50–	55–	60–	65 and over	Not stated
12	76	132	153	148	126	106	74	55	47	71	1891–1895	28	115	170	177	157	119	78	47	29	14	66
10	73	131	158	150	136	109	84	56	49	44	1896–1900	27	113	175	188	157	127	81	50	28	14	40
10	68	130	155	152	136	116	83	62	52	36	1901–1905	29	122	182	190	158	118	78	47	29	15	32
8	61	123	153	152	141	119	90	62	61	30	1906–1910	24	106	177	192	160	129	82	52	30	20	28
7	53	109	151	150	146	125	97	68	71	23	1911–1915	22	98	167	193	171	135	85	51	32	27	19
7	54	105	138	151	155	130	101	70	65	24	1916–1920	70	189	191	162	126	98	64	41	24	19	16
8	55	109	137	135	136	126	104	79	87	24	1921–1925	26	134	200	182	138	109	77	52	33	30	19
6	49	91	117	126	133	133	116	91	114	24	1926–1930	15	76	145	175	156	135	103	75	50	51	19
6	46	97	112	119	126	131	120	96	124	23	1931–1935	16	72	131	162	157	143	110	76	53	62	18
5	43	89	112	113	124	130	126	101	134	23	1936–1940	18	70	116	149	154	146	115	83	61	69	19
6	35	70	99	115	123	134	130	112	151	25	1941–1945	66	110	117	118	134	134	105	79	59	59	19
6	37	68	95	106	122	127	127	113	179	20	1946–1950	46	151	150	130	110	114	95	72	57	60	15
3	23	49	65	92	117	141	143	129	221	17	1951–1955	13	52	101	117	132	142	138	105	87	98	15
2	17	40	55	77	110	137	161	139	244	18	1956	15	41	72	103	133	147	143	120	99	112	15
2	15	36	51	75	112	139	167	139	246	18	1957	14	37	65	101	124	152	145	124	106	116	16
3	14	32	55	69	107	141	157	144	260	18	1958	12	31	58	102	114	153	145	130	113	127	15
3	16	29	54	64	102	137	163	147	268	17	1959	15	37	58	94	109	151	149	124	116	131	16
3	15	28	52	62	103	137	169	151	264	16	1960	17	37	52	87	109	153	147	128	125	132	13

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An attempt has been made to compute remarriage rates for the widowed and divorced separately for years since 1951. These are rather tentative estimates, particularly at the younger ages, but probably give the correct impression of the main differentials. The figures are shown for ages over 25 in Table X.

Table X. Remarriage rates of widowed and divorced persons by sex and age, 1951 to 1960, England and Wales

Per 1,000 population in each group by age and condition

Men						Year	Women					
All ages	25–	30–	35–	45–	55 and over		All ages	25–	30–	35–	45–	55 and over
						Widowed						
32	227	204	148	94	18	1951	9	165	113	56	22	3
32	236	204	151	93	18	1952	8	174	121	54	23	3
31	231	210	147	90	18	1953	8	180	111	56	22	3
30	217	188	145	89	18	1954	8	215	110	54	23	3
31	223	201	150	92	19	1955	8	255	127	56	24	3
29	217	187	137	83	19	1956	7	277	125	56	23	3
29	220	176	133	85	18	1957	7	278	133	54	23	3
28	217	156	129	81	18	1958	6	220	133	51	22	3
29	268	156	130	81	19	1959	7	235	168	53	23	3
29	257	170	131	84	19	1960	7	231	179	54	24	3
						Divorced						
288	528	410	283	195	89	1951	153	373	246	144	68	22
254	455	409	270	197	86	1952	150	406	247	146	73	21
227	371	380	244	175	84	1953	136	378	240	132	70	20
209	338	372	227	163	76	1954	125	370	226	125	63	19
206	333	389	230	156	71	1955	125	384	236	128	64	20
191	343	358	212	150	71	1956	116	381	228	122	60	18
175	346	346	200	131	64	1957	108	361	219	117	58	17
161	364	336	182	119	59	1958	99	350	217	109	53	16
160	366	361	190	116	57	1959	97	351	228	110	54	16
158	385	384	188	116	57	1960	94	368	236	110	51	16

Over the age of 35 the remarriage rates for widowers have been considerably higher than the corresponding age rates for widows and the all ages rate for widowers has been three or four times that for widows. Since 1951 there appears to have been a tendency for the remarriage rate for widowers to fall. The rate for widows under the age of 35 has tended to rise while the rates for widows over the age of 35 have remained relatively stable; it has already been shown in Table IX that young widows form a small, and decreasing, proportion of all widows remarrying.

Divorced persons

Among the 18,473 divorced men who remarried during 1960, 60 per cent married spinsters, 13 per cent married widows and the remaining 28 per cent married divorced women, while of the 17,729 divorced women who remarried, 55 per cent married bachelors, 16 per cent married widowers and 29 per cent married divorced men. The proportional distribution of marriages of divorced

men according to the prior marital condition of their marriage partner was similar to those of recent years, although the last thirty years have seen a fall in the proportion of divorced men who marry spinsters from nearly 80 per cent to the present level of 60 per cent. This decline is accounted for by the increased frequency of divorce during this period with the consequent rise in the proportion of divorced men who marry divorced women simply because there are more divorced persons in the population to remarry. The distribution of marriages of divorced women according to the prior marital condition of their marriage partner in 1960 is also similar to those of recent years, and the main feature of the last thirty years has again been the increase in the proportion of divorced women who marry divorced men; this proportion has recently been at a level which is two and a half times that which obtained in the 1926–30 period. The main compensating fall has been in the proportion of divorced women who marry bachelors.

Table XI shows the proportional age distribution of divorced men and women who remarried in 1960 and in earlier years going back to 1941–45.

This table shows that about two in every five divorced persons who remarried in 1960 were between the ages of 30 and 40 (compared with only 11 per cent of bachelors and 6 per cent of spinsters). The age distribution of divorced men is rather older than that of divorced women and this is reflected in Table L of Part II which shows that the average age at marriage of divorced men who remarried in 1960 was 41 compared with 37 for divorced women. The age distribution of remarriages of divorced men and women in 1960 was a little older than that for the 1941–45 period but the main feature demonstrated by Table XI is the comparatively young age distribution of the remarriages of divorced persons immediately after the Second World War, a peak period for remarriages of divorced persons closely linked with the peak in the number of divorces during the same period.

Separate remarriage rates for divorced men and women are shown in Table X. The remarriage rates for divorced men and women have been much higher than those for widowed men and women at all ages. These high rates point to a relatively short average interval between divorce and remarriage and this is particularly marked at the younger ages. For both men and women the rates decline with age, rapidly up to the age of 35 and then more slowly. The remarriage rates for divorced men are higher than those for divorced women at all the ages shown in Table X.

Since 1951 the remarriage rates for divorced men have declined and a similar, but less well marked, reduction is apparent for divorced women. The rates for 1960 indicate some weakening of this downward trend but, because of the tentative nature of these estimates, annual variations in the rates should be treated with some caution.

The relation between marriage rates and population structure

A set of marriage rates can be summarised in the form of a nuptiality table in the same way as death rates may be presented in the form of a life table. This is a convenient way of demonstrating the implications of a set of marriage rates and the results can be combined with fertility rates or mean family sizes in the calculation of replacement rates (see page 56).

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Table XI. Proportional age distribution at remarriage of divorced persons, 1941 to 1960, England and Wales

	Age of divorced men											Period	Age of divorced women										
	Under 25	25–	30–	35–	40–	45–	50–	55–	60–	65 and over	Not stated		Under 25	25–	30–	35–	40–	45–	50–	55–	60–	65 and over	Not stated
	11	78	196	247	202	135	73	35	15	7	1	1941–1945	30	169	262	229	161	87	37	16	6	1	2
	12	150	242	236	168	102	51	23	10	5	1	1946–1950	66	285	251	188	109	60	26	9	4	1	1
	11	117	223	206	181	129	75	34	15	9	0	1951–1955	49	213	260	187	137	85	42	17	6	3	1
	15	116	200	191	173	143	89	46	17	9	1	1956	55	194	232	192	142	99	52	22	8	3	1
	13	119	200	200	164	140	87	48	18	11	0	1957	55	192	217	194	146	103	56	23	8	5	1
	14	119	191	202	160	142	90	49	21	12	0	1958	59	191	211	200	136	106	58	24	10	4	1
	14	114	192	206	154	137	96	51	23	12	1	1959	57	185	208	200	136	109	62	26	11	5	1
	16	119	187	198	151	139	98	54	23	14	1	1960	62	191	201	193	139	108	60	28	11	6	1

Net nuptiality tables for males and females based on the marriage rates of 1951–55 were published in Appendix C of the 1956 Commentary. Since then marriage rates at the younger ages have risen and abridged nuptiality tables have been calculated to indicate the general effect of this rise. Table XII has been produced from the 1951–55 nuptiality tables and abridged nuptiality tables for 1960; it shows the proportions ever-married between the ages of 15 and 50 which would result if the marriage rates for these particular years were to continue indefinitely. Table XIII, on the other hand, shows the proportions ever-married at these ages for census years since 1881 and also in the annual population estimates for 1941, 1946, 1956, 1959 and 1960.

Table XII. Proportions ever-married, according to the net nuptiality of 1951–55 and 1960, England and Wales

(Per thousand)

Men		Age-group	Women	
Nuptiality of			Nuptiality of	
1951–55	1960		1951–55	1960
6	10	15–19	49	62
251	297	20–24	528	592
685	750	25–29	838	887
844	881	30–34	909	939
897	919	35–39	931	954
920	936	40–44	940	960
930	943	45–49	945	964

Table XIII. Proportions ever-married among men and women, 1881 to 1960, England and Wales

(Per thousand)

	Age of men							Year		Age of women						
15–	20–	25–	30–	35–	40–	45–49			15–	20–	25–	30–	35–	40–	45–49
5	223	609	769	848	878	901		1881	26	335	649	777	834	861	877
4	194	573	753	838	871	896		1891	20	299	606	754	823	850	871
3	174	548	748	824	861	886		1901	16	274	588	745	801	831	858
2	143	508	728	814	852	873		1911	12	243	566	730	790	820	835
4	178	554	769	837	863	876		1921	18	274	590	740	796	821	832
3	139	529	782	863	887	890		1931	18	258	594	751	794	819	832
9	203	617	803	864	888	906		1941	39	402	719	783	801	827	831
9	199	612	798	864	881	891		1946	35	442	713	829	832	836	840
5	238	651	810	867	891	902		1951	44	482	783	854	867	858	848
8	277	665	835	875	897	911		1956	55	542	813	884	890	895	869
12	318	674	843	883	899	916		1959	61	569	835	900	899	909	885
9	301	714	846	885	898	917		1960	61	579	851	906	902	913	891

On the basis of 1960 nuptiality, only 5·7 per cent of the men and 3·6 per cent of the women in the 45–59 age-group would remain unmarried. Comparison between Tables XII and XIII shows that at all but the youngest ages the proportions implied by either the 1951–55 or the 1960 marriage rates are rather higher than any that have actually been recorded in England and Wales. The proportion ever-married for the 45–49 age-group based on 1960 nuptiality exceeded the proportion in the estimated population at mid-1960 by 3 per cent for men and 7 per cent for women.

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It should be remembered that nuptiality tables are based on a population with a particular sex and age structure. It is therefore possible for the male and female tables to be inconsistent in the sense that if the marriage rates on which they are based were to continue in effect indefinitely, they would produce more marriages of men under 50 than of women under 45 whereas in practice these two are usually about equal in number. The reason for this feature is that the sex and age structure of the present unmarried population still contains the balance of the former surplus of women which is now, however, becoming confined to the older ages where few marriages take place. In this way the abridged nuptiality table of 1960 implies 3 per cent more marriages of men under 50 than of women under 45 (the excess was 2 per cent in the 1959 abridged nuptiality table).

The probabilities of marriage on which the abridged nuptiality tables for a given year are based refer to the experience of different generations in a single calendar year. This makes them of limited value as a guide to long-term prospects for which it would be better to compare the experience of different generations at the same ages but in different calendar periods, rather than different generations at different ages in the same calendar period, as is done in Table XIII.

Such proportions were in fact calculated for selected generations between 1862–66 and 1937–41 and published in Table XV of the 1959 Commentary. This table illustrated the slow but steady rise in the proportion ever-married at 45–49 for both men and women. There has been a rise in the proportion ever-married in all age-groups for both men and women since the beginning of this century, although the generations of women born in the later part of the 19th century experienced a slight fall in the proportion ever-married as compared with their predecessors. The proportion ever-married at ages 45–49 seems likely to rise, particularly for women. It also seems likely that the proportions ever-married in particular generations of men and women will move towards those implied by the nuptiality tables unless any major disturbing factor arises.

Comparisons have been made above between the proportions of men and women in the same age-group. Allowance should, however, be made for the difference between the average age at marriage of men and women. In order to obtain a useful estimate of the relative numbers of men and women in the main marrying age-groups a rough allowance has been made for this difference by relating the average of the male populations at ages 15–44 and 20–44 last birthday (about $17\frac{1}{2}$–45 in exact years) to the average of the female populations at ages 15–44 and 15–39 last birthday (15–$42\frac{1}{2}$ in exact years). The estimates so obtained are as follows:

	Census						Mid-1960 (estimate)	Nuptiality table 1951–55	Abridged nuptiality table 1960
	1871	1901	1911	1921	1931	1951			
All conditions	877	876	892	846	892	988	1,000	1,039	1,041
Unmarried ..	786	787	808	724	800	968	1,054	1,087	1,105

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The last two columns are based on the average number of survivors in the nuptiality table for 1951–55 and the abridged nuptiality table for 1960 and it should be remembered that the ratios for the unmarried in these columns are affected by the inconsistency in male and female marriage rates which has already been discussed. If the female rates were to become consistent with the male there would be fewer unmarried women left and the ratios would be slightly larger. The sequence of the figures shows that a combination of factors, including the slight increase in the proportion of male live births, the decrease in the predominantly male net emigration and the much smaller number of male war deaths in 1939–45 than in 1914–18, has been establishing a balance between the sexes in the corresponding marrying age-groups referred to above.

Total married women of reproductive age

The effect of high marriage rates in raising the proportion of the population which is married is an important determinant of the fertility of the community which depends to a considerable extent on the number of married women in the population. Table XIV shows the proportions married in five year age-groups under 50 for selected years since 1911 when the rise in the proportion married first became apparent. The proportions are also shown for the 15–49 aggregate age-group and also for the more critical 20–39 age-group within which 90 per cent of the births occur.

Table XIV. Married women per 1,000 total female population in each age-group and ratio of proportion to that of 1911 taken as 100: 1911, 1931, 1938, 1946, 1951 and 1957 to 1960, England and Wales

Year		Age-group							Aggregates	
		15–19	20–24	25–29	30–34	35–39	40–44	45–49	20–39	15–49
Married women per 1,000 total female population										
1911 ..	..	12	242	558	711	752	755	729	552	502
1931 ..	..	18	257	587,	733	755	749	733	572	529
1938 ..	..	23	328	643	733	771	768	736	623	566
1946 ..	..	35	436	696	800	797	784	762	686	626
1951 ..	..	42	475	769	828	832	812	780	731	666
1957 ..	..	59	552	814	872	862	851	810	782	703
1958 ..	..	60	561	822	880	867	856	815	789	706
1959 ..	..	61	567	829	886	871	862	821	794	707
1960 ..	..	61	577	843	892	874	868	827	800	710
Ratio of proportion to that of 1911 taken as 100										
(*calculated before rounding off the proportions*)										
1911 ..	..	100	100	100	100	100	100	100	100	100
1931 ..	..	151	106	105	103	100	99	101	104	105
1938 ..	..	192	136	115	103	103	102	101	113	113
1946 ..	..	294	180	125	113	106	104	105	124	125
1951 ..	..	354	197	138	116	111	108	107	132	133
1957 ..	..	500	228	146	123	115	113	111	142	140
1958 ..	..	503	232	147	124	115	113	112	143	141
1959 ..	..	513	235	150	125	116	114	113	144	141
1960 ..	..	513	239	151	126	116	115	113	145	141

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The proportion married increases with advancing age, at first rapidly and then more slowly, to a maximum close to age 35; as new marriages are increasingly offset by widowhood the proportion then declines slowly. The proportion married has increased for each age-group throughout the period shown in Table XIV.

The main feature of the figures for individual age-groups is the change which has taken place at the youngest ages; there has been a fourfold increase in the proportion married at ages 15–19, by far the larger part of this change having occurred since 1938. In general the picture is one of a slow rise up to the start of the Second World War and a much accelerated rise since then. The 15–49 age-group represents the fraction of the reproductive years which fall within married life, and Table XIV shows a slight increase in this fraction from $50 \cdot 2$ per cent to $52 \cdot 9$ per cent between 1911 and 1931 followed by a more rapid rise to $56 \cdot 6$ per cent in 1938 and $71 \cdot 0$ per cent in 1960. These increases are partly due to the ageing of the 15–49 age-group since 1911 which has increased the relative number at the older ages in this age-group where the proportion married is greater. This element can be removed by calculating the number of women who would have been married if the age-group proportions married had been those of 1911; the actual number of married women can then be divided by the standardised number to produce a set of marriage indices standardised on the 1911 proportions married. These indices are compared with the unstandardised figures derived from Table XIV in the following statement:

Year	1911	1921	1931	1941	1951	1956	1959	1960
Standardised	$1 \cdot 000$	$1 \cdot 008$	$1 \cdot 022$	$1 \cdot 125$	$1 \cdot 200$	$1 \cdot 257$	$1 \cdot 291$	$1 \cdot 304$
Unstandardised ..	$1 \cdot 000$	$1 \cdot 025$	$1 \cdot 054$	$1 \cdot 201$	$1 \cdot 327$	$1 \cdot 388$	$1 \cdot 408$	$1 \cdot 413$

The above figures show that the true increase in the proportion married among women aged 15–49 was 30 per cent compared with the 41 per cent suggested by the unstandardised proportions. A little less than a third of the latter increase is due to the ageing of the population and is unrelated to the changing incidence of marriage.

Seasonal incidence of marriage

The numbers of marriages and rates per 1,000 population by calendar quarter are shown in serial form in Table D of Part II and monthly numbers of marriages since 1947 are shown in Table N with ratios of the daily average for each month to that of the calendar year.

The proportions of the marriages of each year which took place in each quarter for years since the 1841–50 period are shown in Table XV.

The quarterly distribution of marriages in 1960 differs a little from that of recent years. The September quarter accounted for 30 per cent of the year's marriages, the March quarter for 26 per cent, the December quarter for about 23 per cent and the June quarter for 21 per cent. Part of the difference in the March and June quarters between 1960 and 1959 is due to Easter falling in April in 1960, but in March in 1959. Table XV illustrates the change which has taken place during the last hundred years. In the 1851–60 period the December

**Table XV. Proportion of marriages in each quarter, 1841 to 1960,
England and Wales**

Period			Quarter ended			
			March	June	September	December
1841–1850..	..	..	205	255	239	301
1851–1860..	..	..	206	252	242	300
1861–1870..	..	..	205	252	246	297
1871–1880..	..	..	204	253	245	298
1881–1890..	..	..	197	257	250	296
1891–1900..	..	..	184	265	266	285
1901–1910..	..	..	182	265	280	273
1911–1920..	..	..	186	263	280	271
1921–1930..	..	..	170	266	303	261
1931–1935..	..	..	162	260	317	261
1936–1940..	..	..	166	253	321	260
1941–1945..	..	..	212	268	276	244
1946–1950..	..	..	218	250	303	229
1951–1955..	..	..	289	206	303	202
1956–1959..	..	..	305	191	301	203
1956	..	..	303	195	303	199
1957	..	..	317	190	299	194
1958	..	..	302	195	299	204
1959	..	..	298	186	302	214
1960	..	..	259	212	301	228

quarter accounted for 30 per cent of all marriages, the June and September
quarters for about a quarter each and the March quarter had the smallest share
with 21 per cent. The period up to the outbreak of the Second World War saw
a steady rise in the proportion of marriages in the September quarter, while the
share of the December and March quarters fell. The effect of these changes was
such that in the 1936–40 period the share of the September quarter had risen
to 32 per cent of the total and the proportions in the March and December
quarters had fallen to 17 and 26 per cent respectively; during this period the
share of the June quarter rose very slowly. The period since 1940 has been
marked by the rapid rise in the proportion of marriages in the March quarter.
This rise has had the effect of reducing the proportions in all the other quarters,
but particularly in the June and December quarters.

Table XVI is an extract from Table N of Part II showing the numbers of
marriages in each month and also the ratios of the daily averages for each
month to the daily averages for the calendar years for recent years. The most
noticeable feature is the peak in March when the daily average in 1960 was
$1\cdot8$ times that for the year as a whole; this compares with a 1959 figure for
March of $2\cdot3$ times that for the year as a whole. There is a secondary peak in
September which is approached by slowly rising ratios for the period from June
onwards in contrast to the isolated peak in March. The tendency to a pro-
nounced peak in March irrespective of the date of Easter seems to have become
steadily more marked over the last ten years, although the evidence of the
quarterly figures discussed above suggests that the shift towards March may well
have started during the Second World War. No doubt the main current influence

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Table XVI. Monthly incidence of marriage, 1947 to 1960, England and Wales

Period	January	February	March	April	May	June	July	August	September	October	November	December	Total for period
						Numbers of marriages							
1947–1950	79,800	86,917	172,641	137,984	88,828	151,447	162,258	146,750	162,808	105,026	82,372	154,801	1,531,632
1951–1955	77,794	106,484	322,146	127,251	85,085	149,785	173,716	172,504	185,313	114,109	81,472	158,920	1,754,579
1956	13,651	19,898	73,573	21,113	15,529	32,179	30,144	34,503	42,276	21,158	15,947	32,973	352,944
1957	13,894	19,954	76,244	19,034	12,150	34,620	28,458	38,192	36,967	21,817	18,199	27,374	346,903
1958	12,940	20,777	68,912	21,229	17,434	27,548	27,900	37,115	36,683	24,005	19,048	26,322	339,913
1959	15,430	18,972	67,028	20,121	17,142	26,018	27,390	35,601	39,600	32,649	15,548	24,627	340,126
1960	15,596	21,163	52,185	30,016	13,447	29,432	33,131	29,414	41,035	36,503	15,461	26,231	343,614
				Ratio of daily average for the month to daily average for the year taken as 1,000									
1947–1950	614	734	1,328	1,097	683	1,204	1,248	1,129	1,294	808	655	1,191	1,000
1951–1955	522	786	2,163	883	571	1,039	1,166	1,158	1,286	766	565	1,067	1,000
1956	456	712	2,462*	730	520	1,113*	1,008	1,155	1,462*	709	552	1,104*	1,000
1957	472	750	2,588*	668	412	1,214*	966	1,296*	1,297	741	638*	929	1,000
1958	448	797	2,387*	760	604*	986	966	1,286*	1,313	832	682*	912	1,000
1959	534*	727	2,320	720	593*	931	948	1,232*	1,416	1,130*	556	852	1,000
1960	536*	777	1,793	1,066*	462	1,045	1,138*	1,011	1,457	1,254*	549	901*	1,000

* These months contained five Saturdays.

towards this peak in March is that the income tax year ends on April 5th causing some people to bring their marriage forward into the earlier tax year to take advantage of the additional tax relief. A similar phenomenon has been noted in some other countries, the month depending on the local tax law.

Apart from the concentration in March, there is a tendency towards an annual cycle from the secondary peak already noted in the late summer to the relatively few marriages in the winter months, but these features are affected by the concentrations associated with Easter and Christmas. The true monthly pattern is further disturbed by the distribution of marriages over the days within the week. The popularity of Saturday marriages means that figures for the same month can differ from year to year according to the number of Saturdays in the month. The months marked in Table XVI contained five Saturdays and such months usually have higher ratios than the same months when they contain only four Saturdays.

Marriage incidence in different parts of the country

The numbers of marriages in regions, counties, and county and metropolitan boroughs are shown in Table F of Part II, and the number of persons marrying in each region and conurbation by age and previous marital condition in Table M. These figures have to be used with caution because the district where the marriage takes place may contain the residence of only one of the parties and sometimes of neither. This factor distorts differences between marriage rates for local areas, though less so in comparisons between areas as large as regions and conurbations, and Table XVII shows the marriage rates of 1960 for these areas. In addition to the marriage rates per 1,000 population of all ages, Table XVII shows the marriage rates per 1,000 unmarried women in the age-groups between 15 and 44 and also for the 15–44 aggregate in both an unstandardised form and, in addition, standardised on the England and Wales age distribution. The ratios of the 15–44 age-group rates on the different bases for regions and conurbations to those of England and Wales also appear in Table XVII.

The West Midlands Conurbation has the highest rate per 1,000 population for the individual areas shown in Table XVII. This rate is 12 per cent higher than the rate for England and Wales. Two other conurbations (Greater London and Merseyside) have marriage rates per 1,000 population which are 11 and 10 per cent respectively higher than for England and Wales as a whole; the London and South Eastern Region has the highest rate for a complete region. At the other extreme the Eastern Region has a rate which is 19 per cent below that of England and Wales, and the Southern Region and Wales II also have low marriage rates per 1,000 population.

If the comparison is made in terms of the number of marriages per 1,000 unmarried women aged 15–44 a rather different picture emerges, indicating that many of the differences in the marriage rates per 1,000 population are due not to variations in the probability of marriage but to differences in the sex, age and marital condition structure of the populations of the different areas. The West Yorkshire and West Midlands Conurbations and the North Midland Region have the highest rates per 1,000 unmarried women aged 15–44. On the other hand, the Eastern Region and Wales II still have relatively low rates on this basis. The Merseyside Conurbation, where the marriage rate per 1,000 population is 10 per cent above the England and Wales rate, has a rate per 1,000 unmarried

Table XVII.   Marriage rates in regions and conurbations, 1960, England and Wales

The ratios were calculated before rounding off the rates

Area	Persons marrying per 1,000 population of all ages	Women marrying per 1,000 unmarried women aged 15–	20–	25–	30–	35–44	15–44 Unstandardised	15–44 Standardised	Ratio of rate to that of England and Wales — Persons marrying per 1,000 population of all ages	Women marrying per 1,000 unmarried women aged 15–44 Unstandardised	Standardised
ENGLAND AND WALES	15·0	57·7	268·4	180·7	103·3	45·0	114·0	114·0	1,000	1,000	1,000
Northern Region	14·8	46·8	275·2	185·0	98·2	43·5	109·9	109·8	987	964	964
Tyneside Conurbation	15·6	45·5	266·2	168·0	97·9	46·7	108·9	106·3	1,038	956	933
Remainder of Northern	14·5	47·3	278·8	192·4	98·3	42·1	110·2	111·3	968	967	976
East and West Ridings	15·0	58·5	305·2	203·0	107·5	43·6	120·3	124·2	1,000	1,055	1,090
West Yorkshire Conurbation	15·4	61·0	290·6	205·9	106·0	46·0	121·2	122·8	1,024	1,063	1,077
Remainder of East and West Ridings	14·8	56·9	315·9	200·9	108·9	41·5	119·6	125·3	983	1,049	1,100
North Western Region	15·2	56·6	269·8	176·5	93·9	39·7	112·5	112·1	1,012	987	984
South East Lancashire Conurbation	15·5	63·2	289·3	181·6	96·6	40·0	118·6	120·3	1,021	1,041	1,055
Merseyside Conurbation	16·5	48·6	233·3	180·1	94·5	40·9	103·9	100·7	1,100	911	883
Remainder of North Western	14·4	55·9	278·5	169·6	90·9	38·7	112·6	112·8	959	988	990
North Midland	14·7	65·8	296·7	203·0	111·8	49·1	123·0	127·0	976	1,080	1,114
Midland	15·6	62·8	283·8	182·1	102·7	49·9	120·8	120·7	1,036	1,060	1,059
West Midlands Conurbation	16·8	65·0	288·7	197·2	122·3	51·3	127·0	125·4	1,119	1,114	1,100
Remainder of Midland	14·3	60·5	278·3	166·6	84·6	48·5	114·4	115·9	955	1,004	1,017
Eastern	12·2	52·2	233·2	143·6	86·0	39·5	98·6	98·9	814	865	867
London and South Eastern Region	16·4	57·5	254·6	187·3	113·5	47·2	115·3	112·3	1,094	1,012	985
Greater London Conurbation	16·6	55·5	242·8	189·1	116·8	48·9	114·2	109·3	1,105	1,002	959
Remainder of London and South Eastern	15·9	63·3	296·0	180·7	101·7	41·9	118·7	122·2	1,060	1,042	1,073
Southern	13·6	60·5	253·0	172·3	99·6	44·2	108·9	111·1	908	956	974
South Western	14·3	59·6	269·5	170·3	104·4	45·6	113·2	114·5	952	993	1,005
Wales (including Monmouthshire)	14·7	56·1	265·0	169·3	92·9	45·9	110·6	111·1	979	970	975
Wales I (South East)	15·0	60·8	284·4	175·8	90·9	48·1	116·2	118·4	1,000	1,020	1,039
Wales II (remainder)	13·9	43·8	223·6	157·1	97·3	41·2	97·6	94·5	927	856	829

women aged 15–44, 9 per cent below the corresponding national rate. The effect of the differences in the basis of the rates is also demonstrated by the upward change in the rate for the North Midland Region and both parts of the East and West Ridings Region and the downward movement in the rates for the Greater London and Tyneside Conurbations when the number of marriages is expressed in terms of unmarried women aged 15–44.

The effect of further standardisation on the basis of the England and Wales age distribution within the 15–44 aggregate age-group is in general to shift the rates a little further in the same direction. The relative proportion of unmarried women in the 15–44 age-group is of more importance as a factor affecting the relative frequency of marriage than the age distribution within that group. Nevertheless, the differences in the proportion of unmarried women in the 15–44 age-group do not account entirely for the differences in the frequency of marriages between the areas in Table XVII. The marriage rates per 1,000 unmarried women in the North Midland Region and the West Midlands and West Yorkshire Conurbations are higher than for England and Wales for all the age-groups identified in Table XVII. Conversely, the rates are lower for all age-groups in the Eastern Region and the Merseyside Conurbation and Wales II.

DIVORCES

The numbers of dissolutions and annulments of marriage, petitions filed and decrees absolute granted, in 1960 and past years are shown in Table O in Part II and the dissolutions and annulments of 1960 are analysed further in Tables P1 to P6 of Part II. In 1960 there were 27,870 petitions for dissolution of marriage and 672 for annulment; 23,369 decrees for dissolution of marriage and 499 for annulment of marriage were made absolute. The number of petitions for dissolution is higher by 8 per cent than the number for 1959 but the number of decrees for dissolution is slightly below the 1959 number. The 23,868 decrees absolute for dissolution and annulment which were made absolute in 1960 represent a rate of 20 per 10,000 married couples.

Table XVIII summarises the figures of Table O for the last three decades. It relates the number of petitions filed and decrees made absolute to the number of married women aged 20–49. The use of this age range, which has recently accounted for 85 to 90 per cent of all divorces, as a denominator in place of the total number of all married couples affords a rough measure of standardisation. The rates from Table XVIII are shown in Diagram 2.

Table XVIII. Dissolutions and annulments of marriage: new petitions filed and decrees made absolute, 1931 to 1960, England and Wales

Year	Petitions filed		Decrees absolute granted	
	Number	Per 1,000 married women aged 20–49	Number	Per 1,000 married women aged 20–49
1931–35*	4,784	0·80	4,011	0·67
1936	5,749	0·92	4,057	0·65
1937	5,903	0·93	4,886	0·77
1938	10,233	1·59	6,250	0·97
1939	8,703	1·33	7,955	1·22
1940	7,086	1·05	7,755	1·15
1941	8,305	1·21	6,368	0·93
1942	12,003	1·72	7,618	1·09
1943	15,385	2·19	10,012	1·43
1944	18,969	2·70	12,312	1·75
1945	25,711	3·65	15,634	2·22
1946	43,163	6·09	29,829	4·21
1947	48,501	6·81	60,254	8·47
1948	37,919	5·28	43,698	6·08
1949	35,191	4·87	34,856	4·82
1950	29,729	4·09	30,870	4·24
1951	38,382	5·23	28,767	3·92
1952	34,567	4·69	33,922	4·60
1953	30,542	4·14	30,326	4·11
1954	29,036	3·93	28,027	3·79
1955	28,314	3·83	26,816	3·62
1956	28,426	3·83	26,265	3·54
1957	27,858	3·74	23,785	3·19
1958	26,239	3·52	22,654	3·04
1959	26,327	3·52	24,286	3·25
1960	28,542	3·80	23,868	3·18

* Annual average.

Diagram 2
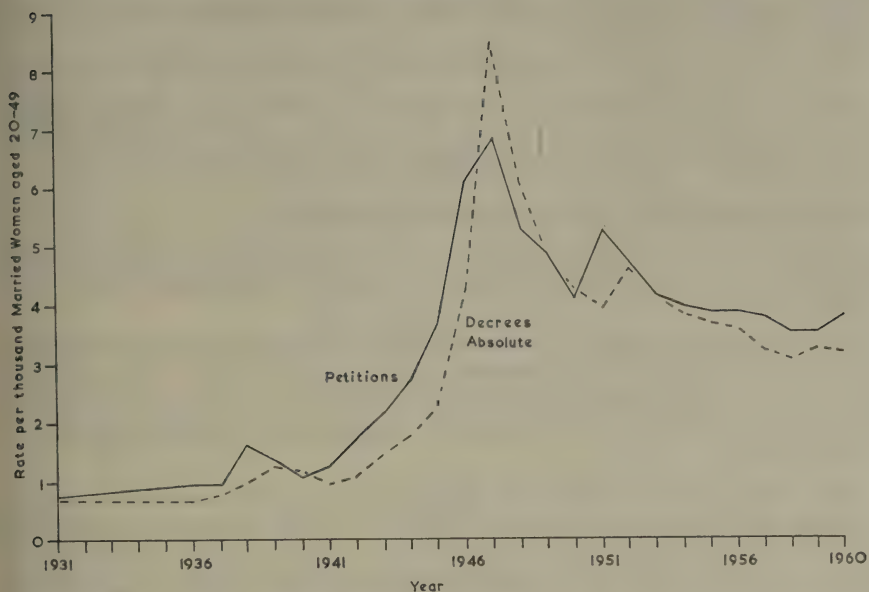
Dissolutions and annulments of marriage: new petitions filed and decrees made absolute per 1,000 married women aged 20–49, 1931 to 1960, England and Wales

The Matrimonial Causes Act of 1857 first made civil divorce available without a private Act of Parliament, but the rise in the number of divorces was not disproportionate to the increase in the population until the First World War after which there was a slow rise in the incidence of divorce until the extension of the permissible grounds for divorce under the Matrimonial Causes Act of 1937. The effect of this Act is shown by the rise in the rate of petitioning in 1938 and in decrees absolute granted in 1939 and 1940. The Second World War produced a sharp and sustained rise in petitioning and the granting of decrees absolute from 1942 until 1947. The fall in the rates of petitioning and the granting of decrees absolute from the peak of 1947 appears to have been partly checked by the enactment of the Legal Aid and Advice Act of 1949 which increased the financial assistance to litigants. The effect of this Act appears in the rise in petitions in 1951 (the Act came into operation on 2nd October 1950) and in decrees absolute granted in 1952. The disturbance occasioned by this Act seems to have worked itself out by 1954 and since then the rates for both petitions and decrees absolute granted have tended to fall slowly. The apparent rise in the number of decrees absolute granted in 1959 and the return in 1960 to the earlier trend may be partly due to the depression of the figures for 1958 by the operation of the Matrimonial Causes (Decree Absolute) General Order 1957, which applied to petitions filed on or after 30th April 1957 and which increased the normal interval between the granting of a decree *nisi* and the making of it absolute from six weeks to three months. The rise in petitions in 1960 appears to be linked with a change in the income limits for legal aid.

In 1960 the rate for decrees absolute granted per 1,000 married women aged 20–49 was 16 per cent lower than in 1954. This decline must be set in perspective against the great upheaval in the level of divorce rates during and after the

Second World War which is clearly shown up in Diagram 2. Allowing for the slight disturbance in 1958 and 1959 there is some indication that the rate of dissolution may be stabilising.

Over the period between 1954 and 1960 it appears that nine out of ten of the petitions filed for dissolution of marriage have resulted in a decree absolute being granted and seven or eight out of every ten petitions for the annulment of marriage have resulted in the granting of a decree absolute.

Parties to whom and grounds on which decrees granted

Table P1 in Part II shows figures of the decrees made absolute in 1960 classified by the party to whom the decree was granted and the grounds on which it was granted.

Among the 23,868 decrees absolute granted in 1960, 499 were for annulment of marriage of which 51 per cent were granted to the husband. The remainder were decrees for dissolution of marriage of which 45 per cent were granted to the husband. There were 82 cases where the decree of dissolution was granted to both parties.

Table XIX shows for 1960 the distribution of grounds on which decrees absolute were granted according to the party to whom the decree absolute was granted. The entries in this table amount to more than the total number of decrees because decrees were sometimes granted on more than one ground and sometimes to both parties. Section (ii) shows the distribution of each ground by the party to whom the decree was granted and Section (iii) shows the proportion of the decrees granted to each party, in which each ground was mentioned (either alone or in association with one or more other grounds).

Table XIX. Grounds on which decrees absolute of dissolution were granted, by party, 1960, England and Wales

Party to whom decree absolute of dissolution granted	Ground						
	Adultery	Desertion	Cruelty	Unsound mind	Presumed dead	Others	Total
(i) Numbers							
Husband	6,407	4,221	245	96	13	—	10,982
Wife	5,712	4,506	3,582	69	33	29	13,931
(ii) Distribution per 1,000 of each ground, by party							
Husband ...	529	484	64	582	283	—	441
Wife	471	516	936	418	717	1,000	559
(iii) Distribution per 1,000 total grounds for each party, by ground							
Husband ...	584	384	22	9	1	—	1,000
Wife	411	323	257	5	2	2	1,000

The distribution by ground for each party for 1960 was similar to that for 1959. Adultery was the most frequent ground, accounting for 58 per cent of all grounds mentioned where the decree was granted to the husband and 41 per cent of all grounds where the decree was granted to the wife. Among decrees in which adultery was mentioned as a ground, 53 per cent were granted to the husband. Desertion is the second most frequent ground; 52 per cent of the decrees where desertion was a ground were granted to the wife. Cruelty is

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the third common ground occurring mainly in decrees granted to the wife (94 per cent of decrees where cruelty was mentioned in 1960 were granted to the wife). These three main grounds accounted for 99 per cent of all the grounds mentioned in decrees absolute granted in 1960.

Present ages of parties

Dissolutions and annulments by age of husband and wife at the date of the decree absolute are shown in Table P2 of Part II with rates per 1,000 married men or women in that age-group. These rates for 1960 are reproduced in Table XX with comparable figures for years since 1950.

Table XX. Divorce rates per 1,000 married population by age at divorce, 1950 to 1960, England and Wales

Year	Age at date of decree absolute								
	All ages	Under 25	25–	30–	35–	40–	45–	50–	60 and over
				Husbands					
1950	2·8	2·5	5·7	5·3	4·4	3·3	2·3	1·3	0·3
1951	2·6	2·0	4·8	5·0	4·2	3·2	2·3	1·3	0·3
1952	3·0	2·1	5·3	5·7	4·8	3·8	2·8	1·7	0·4
1953	2·7	2·2	4·8	5·0	4·3	3·4	2·6	1·4	0·4
1954	2·5	2·1	4·3	4·4	4·1	3·2	2·3	1·4	0·3
1955	2·4	2·0	4·2	4·4	3·7	3·0	2·3	1·3	0·3
1956	2·3	1·9	4·1	4·2	3·5	3·0	2·3	1·3	0·3
1957	2·1	1·1	3·6	3·7	3·3	2·6	2·2	1·3	0·3
1958	1·9	1·0	3·3	3·5	3·1	2·6	2·0	1·2	0·3
1959	2·1	1·1	3·6	3·9	3·2	2·9	2·1	1·3	0·3
1960	2·0	1·0	3·6	3·8	3·2	2·7	2·0	1·2	0·3
				Wives					
1950	2·8	3·3	6·2	5·1	3·8	2·8	2·1	0·9	0·2
1951	2·6	2·9	5·3	4·8	3·6	2·8	1·9	1·0	0·2
1952	3·0	3·3	6·1	5·3	4·3	3·3	2·4	1·2	0·3
1953	2·7	3·2	5·3	4·7	3·9	2·9	2·2	1·1	0·2
1954	2·5	2·9	4·9	4·2	3·7	2·7	2·0	1·0	0·2
1955	2·3	3·0	4·6	4·2	3·2	2·6	2·0	0·9	0·2
1956	2·3	2·9	4·6	4·0	3·2	2·6	1·9	0·9	0·2
1957	2·0	2·0	4·1	3·6	2·9	2·3	1·8	0·9	0·2
1958	1·9	2·0	3·8	3·3	2·8	2·3	1·7	0·9	0·2
1959	2·1	2·1	4·1	3·7	2·9	2·5	1·8	1·0	0·2
1960	2·0	2·2	4·2	3·5	2·9	2·2	1·7	0·9	0·2

The slightly younger age distribution of wives compared with husbands at the time of the divorce is reflected in the age rates shown in Table XX. This feature derives from the younger marriage age distribution of wives. Just over half the divorced husbands and wives were between 25 and 40 years old.

In comparing divorce rates by age since 1950 it appears that the fluctuations have been greater at the younger ages for both husbands and wives. In 1960 the divorce rate for husbands under 25 years of age was 40 per cent, and the

25–29 age-group nearly 63 per cent, of the corresponding rates in 1950, while the rates for husbands aged over 40 were only 12 per cent less than the corresponding rates in 1950 and a similar though less well marked gradient with age is visible in a similar comparison of age specific divorce rates of wives.

Duration of marriage and marriage age of wife

Table P4 in Part II shows the number of decrees absolute granted during 1960, classified by duration of marriage and the marriage age of the wife. Divorce rates per thousand married women are also shown where the wife was

Table XXI.   Dissolutions and annulments of marriage made absolute, by duration of marriage and marriage age of wife.   Rates per 1,000 married women, 1960, England and Wales

Age of wife at marriage	Duration of marriage (completed years)															
	0–2	3	4	5	6	7	8	9	10	11	12	13	14	15–19	20–24	24–29
Under 20	0·2	3·8	9·5	9·1	8·2	8·7	7·9	7·4	6·8	6·6	6·0	6·1	5·2	4·0	3·7	2·5
20– ..	0·2	2·1	3·8	4·5	4·3	4·1	3·8	3·5	3·5	3·2	3·2	3·1	3·2	2·4	1·9	
25– ..	0·2	1·5	3·1	2·8	3·0	2·8	2·6	2·6	2·5	2·8	2·7	2·5	2·2	1·8		
30– ..	0·5	2·0	3·4	3·4	2·5	3·2	2·4	2·4	2·3	3·3	2·6	2·3	1·4			
35– ..	0·5	2·0	3·7	2·9	2·8	3·0	2·6	2·8	1·5	3·0	2·4					
40–44 ..	0·6	1·2	3·2	2·9	2·9	1·9										

Diagram 3
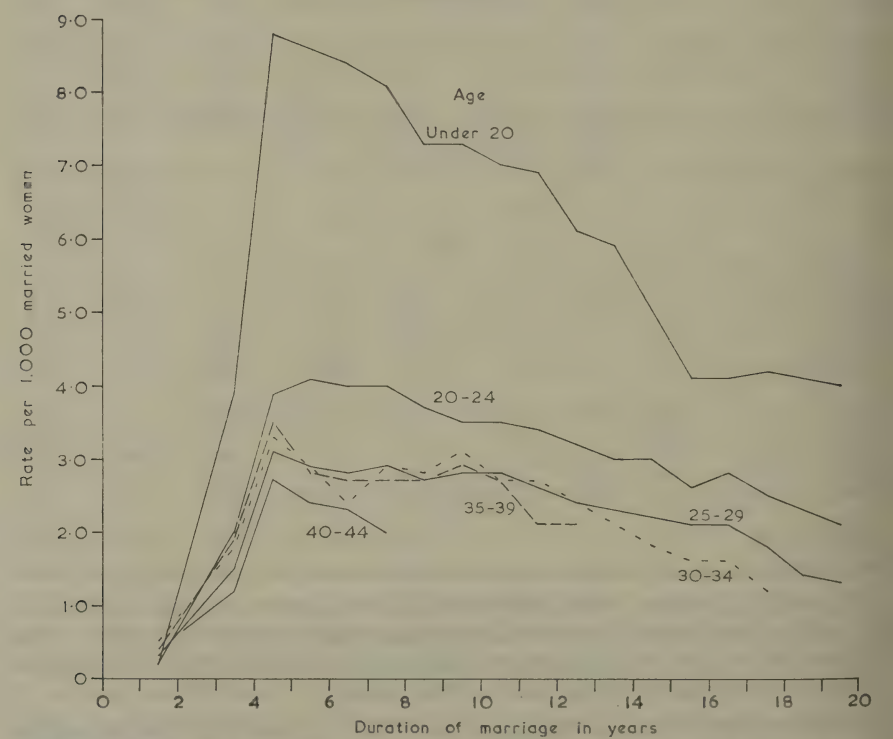
Rates of dissolution and annulment of marriage by duration of marriage and marriage age of wife, 1958–60, England and Wales

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under the age of 50 at the date of the decree, these being the only ages where estimates of the numbers of married women are available. An extract from the rates section of Table P4 is reproduced in Table XXI. Diagram 3 illustrates corresponding rates, shown in Table XXI, for the 1958–60 period.

In general, age at marriage exerts a greater influence on divorce rates than does current age. The rates in Table XXI show a regular progression; they fall with increasing age at marriage and also with increasing duration of marriage (normally a petition for divorce may not be filed within three years of the date of the marriage). Table XXI shows that divorce rates tend to be highest when the marriage has been in existence between four and eleven years, and then to decline steadily with increasing marriage duration. Diagram 3 illustrates the effect of age at marriage. The increased risk of divorce in those marriages where the wife was under the age of 20 at marriage is clearly shown in this diagram. Less marked but still distinct is the differential between marriages where the wife was aged 20–24 at marriage and those where the wife was over the age of 25 at the time of the marriage. Above the age of 25 it appears that age at marriage has relatively little effect on the frequency of divorce, at least for the first ten or twelve years of the marriage.

The following statement shows the number of marriages which would at certain durations have been dissolved out of a thousand marriages contracted at each of the marriage age-groups shown if the rates in Table P4 were to be maintained indefinitely, ignoring the effect of mortality:

Age of wife at marriage	Duration in years			
	5	10	15	20
Under 20	14	54	83	101
20–24	7	26	42	54
25–29	5	19	31	40
30–34	7	21	32	—
35–39	7	21	—	—

This statement illustrates again the higher risk of divorce of those marriages where the wife was aged less than 20 at the time of the marriage. It should be noted, however, that to combine these probabilities of divorce in this way is not a reliable guide to the future long-term prospects. These probabilities are analogous to life table probabilities in referring to the experience in a single calendar year of different cohorts. When sufficient data have been accumulated it will be possible to compare the experience of different cohorts at equal marriage durations and this should produce a more satisfactory guide to long-term prospects.

Marriage age of husband and wife in combination

Marriages dissolved and annulled during 1960 are classified in Table P3 of Part II by the marriage ages of husband and wife in combination. The absence of a cross classification by year of marriage prevents the calculation of wholly satisfactory divorce rates per thousand related marriages. A full cross classification was published in 1957 and will be repeated at intervals.

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The full cross classification made in 1957 and the tables published in the 1958 and 1959 Commentaries to illustrate the main factors, indicated a general tendency for the likelihood of divorce to be lowest when the two age-groups at marriage were the same and to increase on either side of this equality, rising higher at the younger age of the other party. This effect results from the interplay of the two factors: increasing likelihood of divorce with low age at marriage and with widening difference in marriage ages of the two parties.

Previous marital condition by marriage age

The decrees made absolute during 1960 are analysed in Table P6 according to the previous marital condition of both parties in combination, cross classified by the age of the wife at the time of the marriage. In 1957 this topic was discussed more fully with the aid of a further cross classification by year of marriage which permitted the calculation of satisfactory rates based on the number of original marriages. The general picture shown for 1960 differs little from that of 1957 which indicated that the likelihood of divorce tended to be lowest for first marriages, highest for marriages where the partners had been divorced previously; those marriages where the partners had been widowed occupied an intermediate position in the scale of risk.

Children of the marriage

Table P5 in Part II shows the dissolutions and annulments of marriage during 1960 according to the number of surviving children of the marriage. These children are the children alive at the date of the petition irrespective of their age and, as well as children of the dissolved marriage, may also include children legitimated by that marriage and any adopted children.

The total number of children involved in the 23,868 dissolutions and annulments in 1960 was 32,534, an average of 1·4 children per couple. The average number of children per couple fell steadily from 1·7 for those decrees where the wife was aged under 20 at marriage to 0·9 for the 35–39 age at marriage and 0·5 where the wife was aged 45 or over at marriage.

Among all marriages dissolved during 1960, 32 per cent were childless, 30 per cent had one child, 31 per cent had two or three children and seven per cent had four or more children. The proportion of childless marriages rose from a fifth where the wife was aged under 20 at marriage to over three fifths where the wife was 35 or over at the time of the marriage. The proportion of childless married women under 50 enumerated in the 1951 Census was 12 per cent in the under 20 age at marriage group, rising to 51 per cent for those married at age 35 and over. Allowing for the differences in the two sets of data, this suggests that divorce rates for childless couples may be about twice as high as the average for the marriage-age group concerned, taking those with children and the childless together.

WIDOWHOOD

Table SS of Part II shows the number of marriages ended by the death of one partner, classified by the ages of the deceased and surviving partners. This table, however, is deficient in respect of those deceased persons about whose marital condition no statement was supplied when the death was registered. The incidence of this occurrence as a percentage of all deaths in 1960, as well as in the two previous years, is set out below for men and women separately.

Table XXII. Percentage of deaths where marital condition was not stated, 1958 to 1960, England and Wales

Men			Age at death	Women		
1958	1959	1960		1958	1959	1960
3·6	3·5	3·4	**15 and over**	0·05	0·05	0·06
10·5	10·2	11·8	15–	0·20	0·75	0·74
37·2	34·1	36·7	20–	0·92	1·07	0·93
29·0	25·0	27·8	25–	0·54	0·43	0·70
21·9	19·7	19·7	30–	0·27	0·07	0·16
14·5	13·0	13·5	35–	0·26	0·24	0·18
10·8	9·4	10·1	40–	0·17	0·12	0·19
7·0	6·9	6·5	45–	0·03	0·09	0·10
5·3	4·9	4·8	50–	0·09	0·09	0·05
4·0	3·7	3·8	55–	0·02	0·05	0·12
3·5	3·1	3·1	60–	0·04	0·05	0·06
2·6	2·7	2·4	65–	0·06	0·06	0·07
2·2	2·5	2·1	70–	0·04	0·06	0·04
2·4	2·3	2·1	75 and over	0·04	0·03	0·04

The " not stated " percentage of female deaths is persistent but very low. In each age-group it is minute compared with the equivalent percentage of male deaths. The marital condition of deceased females could always be inferred from the former Rank or Profession (now Occupation) column of the death registers. For male deaths the " not stated " percentage is also persistent, though there has been a slow uneven decline from a level of 5 per cent in 1949. But, unlike the female equivalent, it is significant in every age-group which could include married men and is substantial at younger ages. The marital condition of deceased persons is normally obtained under the Population (Statistics) Act, 1938, as amended by the Population (Statistics) Act, 1960; but this Act does not apply in the case of deaths registered on a coroner's certificate after an inquest. This accounts for the general scale of omission of marital condition for males. Since the beginning of 1961 coroners have been asked to supply this information when it is available to them. Male deaths by accident, poisoning or violence (which normally involve an inquest) amounted to the following percentages of all deaths of males between twenty and forty years of age:

Age-group			1958	1959	1960
20–24 ..	..	..	60	62	65
25–29 ..	..	..	47	47	48
30–34 ..	..	..	35	34	36
35–39 ..	..	..	24	23	23

The necessity for a rateable distribution of the "not stated" means there must be some slight reservations about the numerators of the widowhood rates, which measure the number of married women (men) whose husbands (wives) died in the current year per 1,000 married women (men) in the specified age-group. It may lead to some bias in that such persons are likely to be single and to be concentrated in the younger ages; but the amount of such a bias will be small, particularly in relation to the "not stated" elements consequent on registration on a coroner's certificate. It is possible that the widowhood rates for women in Table XXIII below are slightly over estimated through such bias.

Table XXIII. Widowhood rates, 1956 to 1960, England and Wales

1956	1957	1958	1959	1960	Age of surviving spouse	1956	1957	1958	1959	1960
Deaths of wives per 1,000 married men						Deaths of husbands per 1,000 married women				
6·8	6·8	6·7	6·7	6·2	15 and over	14·0	14·0	14·1	14·0	12·9
0·5	0·4	0·4	0·4	0·3	15–	0·8	0·9	0·8	0·8	0·6
0·6	0·6	0·6	0·6	0·5	25–	1·1	1·1	1·0	1·0	0·8
0·8	0·8	0·7	0·7	0·6	30–	1·6	1·5	1·5	1·5	1·3
1·2	1·3	1·2	1·1	1·2	35–	2·7	2·6	2·6	2·6	2·4
1·8	1·9	1·8	1·7	1·7	40–	4·5	4·6	4·6	4·5	4·2
2·9	2·9	2·8	2·7	2·7	45–	7·7	7·9	7·7	7·7	7·2
4·5	4·6	4·4	4·3	4·3	50–	13·1	13·2	13·0	13·0	12·3
7·4	7·5	7·1	7·2	6·8	55–	22·0	21·9	21·5	21·4	19·8
11·8	11·5	11·4	11·2	11·2	60–	33·3	33·0	33·1	32·3	31·4
19·0	18·3	18·3	18·2	17·6	65–	49·8	49·9	49·9	49·0	47·7
30·4	29·4	29·4	28·7	28·1	70–	72·3	69·8	72·0	70·9	66·7
59·2	56·0	57·3	56·5	56·4	75 and over	111·9	105·9	110·7	109·0	106·1

At this distance from the 1951 Census there may also be some distortion in the estimated number and age distribution of married men and women in the population. The preliminary results of the 1961 Census reveal that the net addition to the population over the decade since the previous Census by inward and outward migration has been correctly estimated for persons of all ages and marital conditions; but this does not mean that the number, sex, age and marital condition of the two gross "ins" and "outs" figures of which this is the difference are necessarily confirmed. Only the final results of the 1961 Census can show up any change (other than the natural change) in the sex and marital condition structure of the population to confirm or modify the figures we have used.

This warns us against over emphasis on apparent changes in particular age-groups. But it does not affect the broad conclusions to be drawn from the data available. These are several. The chance that a married woman aged 25 will be a widow by 45 is still about twice that of her own death by that age. Perhaps even more outstanding and certainly of great social significance is the continuing assurance, whatever the bias in Table XXIII above, that the current level of mortality at ages under 45 is so low that widowhood is not seriously depleting the younger married population. Moreover, death is of comparatively low incidence among married women in the reproductive age-groups.

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BIRTHS

The number of live births which occurred in England and Wales in 1960, 785,005, was the highest in any year since 1947; it was 4·9 per cent higher than in 1959 compared with increases of 2·4 per cent and 1·1 per cent between 1957 and 1958 and 1958 to 1959 respectively. The birth rate per 1,000 population rose to 17·1 which was the highest since 1948. The numbers of births since the 1851–60 period classified by legitimacy are shown in Table XXIV.

Table XXIV. Live births and birth rates by legitimacy, 1851 to 1960, England and Wales

Period	Total live births	Live birth rate per 1,000 population	All live births per 1,000 women aged 15–44	Legitimate live births	Legitimate live births per 1,000 married women aged 15–44	Illegitimate live births	Illegitimate live births per 1,000 unmarried women aged 15–44
1	2	3	4	5	6	7	8
1851–1860	6,471,650	34·1	144·9	6,048,479	281·0	423,171	18·3
1861–1870	7,500,096	35·2	151·0	7,043,090	287·3	457,006	18·2
1871–1880	8,588,782	35·4	153·6	8,161,584	295·5	427,198	15·1
1881–1890	8,890,238	32·4	138·7	8,471,116	274·6	419,122	12·6
1891–1900	9,155,153	29·9	122·7	8,773,351	250·3	381,802	9·6
1901–1910	9,298,209	27·2	109·0	8,927,791	221·6	370,418	8·2
1911–1920	8,096,222	21·8	87·7	7,706,457	173·5	389,765	8·1
1921–1930	7,129,070	18·3	73·9	6,818,295	143·6	310,775	6·3
1931–1935	3,022,864	15·0	61·7	2,891,469	115·2	131,395	5·5
1936–1940	3,041,652	14·7	60·9	2,913,834	107·3	127,818	5·6
1941–1945	3,346,343	15·9	69·3	3,116,516	105·4	229,827	11·4
1946–1950	3,904,666	18·0	80·9	3,690,413	122·5	214,253	11·7
1951–1955	3,377,098	15·2	72·5	3,216,521	105·0	160,577	10·1
1956	700,335	15·6	77·0	666,801	108·2	33,534	11·4
1957	723,381	16·1	80·0	688,819	111·5	34,562	12·1
1958	740,715	16·4	82·1	704,541	113·9	36,174	12·8
1959	748,501	16·4	83·0	710,340	114·7	38,161	13·5
1960	785,005	17·1	86·7	742,298	119·2	42,707	15·1

The birth rate per 1,000 population does not permit a true appreciation of fertility trends, changes in which may be masked (in this index) by changes in sectors of the population other than that concerned with childbearing. Births may be more appropriately related to the number of women of childbearing age (conventionally taken as 15–44) instead of to the total population and, further, the legitimate and illegitimate births may be related to the married and unmarried women respectively in the 15–44 age range; such rates are shown in columns 4, 6 and 8 respectively of Table XXIV.

In 1960 the birth rate per 1,000 women aged 15–44 showed an increase of nearly four and a half per cent as compared with the previous year. Although the number of legitimate live births in 1960 was 27 per cent higher than the average annual number for the period 1936–40, there is also a larger proportion of women in the reproductive age range who are now married with the result that the legitimate birth rate in 1960 per 1,000 women aged 15–44 was 11 per cent above the rate for 1936–40. Conversely, while the illegitimate birth rate in 1960 was 2·7 times the rate in 1936–40 the number of illegitimate births was only 1·7 times as many, owing to the smaller number of unmarried women now in this age-group.

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Incomplete statement at birth registration

The birth statistics now under consideration are obtained by the analysis of the information given at birth registration. These annual statistics are slightly incomplete due to an occasional failure to obtain a record of the mother's age, duration of marriage, or number of previous children. The proportion of " not stated " cases of various types is shown in Table QQ for women married once only. For all types of information combined this proportion amounted to one half per cent in 1960. As no severe bias is expected in this small number of cases they have been distributed proportionately among the " stated " in Tables AA, HH, II, LL, and MM. It is considered that most users will find this form of presentation more convenient.

Birth occurrences and registration time lag

The statutory period allowed for registration of either a live birth or a stillbirth is 42 days and there is generally an appreciable time lag between the occurrence of a birth and its registration. In the past, the time lag was found to decrease markedly after the introduction of an incentive to register earlier, for example, by the dependence of the issue of Family Allowances upon birth registration. Conversely, registration has become more tardy whenever the incentives have been removed or have become less compelling. In 1960 the average time lag between the occurrence and the registration of a birth was nearly fourteen days.

The importance of this time lag from the statistical aspect is its influence on the difference between the births registered in a period and the number occurring in the same period. Occurrences are usually the more appropriate statistics for the measurement of fertility, but figures for registrations are available sooner. The difference between the two is influenced by the time lag in two ways. A difference will occur, even though the time lag is constant, if birth incidence is changing; and also, even though the birth incidence be constant, if the time lag is changing. In practice both factors operate. The combined effect of these factors may be measured by the ratio of occurrences to registrations, which in 1960 was $1 \cdot 0036$.

Tabulation basis

Fertility tabulations may be made on the basis of either live births or maternities, and which is more convenient depends upon the use to which the tabulations are put. The tables in Part II distinguish so many characteristics that it is neither practical nor economic to provide completely parallel classifications of births and maternities. Full analyses by legitimacy and mother's age are given for both live births and maternities (Tables AA to FF and TT), but the legitimate fertility tabulations by duration of marriage or number of previous children are restricted to maternities (Tables HH, II, KK, LL, MM and QQ). The legitimate fertility rates by age of mother and year and duration of marriage (Table OO) were in terms of maternities until 1955 but since 1956 they have been converted to a live birth basis by ratios of the kind shown in Table XXV. Table PP (mean family size by year of marriage) has always related to live births.

Maternities are slightly greater in number than live births as stillbirths included in the former exceed multiple births excluded. The excess is small and the maternity statistics can be converted to live birth figures with enough accuracy for most purposes by means of the appropriate ratios which are shown for 1960 in Table XXV.

Table XXV. Ratio of legitimate live births to legitimate maternities by age of mother at maternity, 1960, England and Wales

	Age of mother at maternity					
All ages	Under 20	20–	25–	30–	35–	40 and over
0·992	0·990	0·993	0·994	0·992	0·988	0·970

The tables distinguishing duration of marriage and numbers of previous children (Tables HH to QQ) are confined to women married once only. Comparable statistics for women married more than once and for all married women, both classified by duration of *current* marriage, relating to 1952, were published in the 1955 Commentary where ratios comparing the three sets of fertility rates were also given (pages 30–33).

Illegitimate births and pre-marital conceptions

Among the 791,584 maternities which occurred in 1960, 5·5 per cent (43,281) were illegitimate. Tables B and C in Part II and Table XXIV contain serial records of illegitimate births since 1851. Numbers of illegitimate maternities since 1938 are shown in column 2 of Table XXVI and column 3 shows the numbers of pre-maritally conceived legitimate maternities. The number of pre-maritally conceived legitimate maternities has been taken as approximately equivalent to those at marriage durations under 9 months (8½ months before 1952). The combined proportion of extra-maritally conceived maternities is shown in column 5.

Table XXVI. Illegitimate maternities and pre-maritally conceived legitimate maternities, 1938 to 1960, England and Wales

Year	Illegitimate maternities	Pre-maritally conceived legitimate maternities*	Total maternities conceived extra-maritally*		Percentage of extra-maritally conceived maternities legitimated by marriage of parents before birth of child
			Numbers	Percentage of all maternities	
1	2	3	4	5	6
1938	27,440	64,530	91,970	14·4	70·2
1939	26,569	60,346	86,915	13·8	69·4
1940–1944† ..	39,542	43,146	82,688	12·4	52·2
1945–1949† ..	49,466	52,557	102,023	13·0	51·5
1950	35,816	54,188	90,004	12·8	60·2
1951	33,444	50,477	83,921	12·3	60·1
1952	33,088	50,740	83,828	12·3	60·5
1953	33,083	50,266	83,349	12·1	60·3
1954	32,128	50,901	83,029	12·2	61·3
1955	31,649	50,638	82,287	12·2	61·5
1956	34,113	54,895	89,008	12·6	61·7
1957	35,098	56,203	91,301	12·5	61·6
1958	36,787	56,581	93,368	12·5	60·6
1959	38,792	57,638	96,430	12·8	59·8
1960	43,281	60,972	104,253	13·2	58·5

* From 1952 onwards the figures relate to women married *once only*.
† Annual averages.

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Legitimate maternities at these short durations and illegitimate maternities can usefully be considered together as they both relate to mothers who were unmarried at the time of conception. During and immediately after the Second World War the numbers of illegitimate maternities and pre-maritally conceived legitimate maternities tended to move in opposite directions, leaving the total number of extra-maritally conceived maternities relatively stable. This feature has been less well marked in recent years but is still true for the period since 1938 taken as a whole.

In Table XXVII the extra-maritally conceived maternities have been related to the population at risk of producing such maternities. This is the average number of unmarried women between the beginning of April in the stated year and the same date of the previous year. As an approximation, the number of unmarried women at the end of September of the previous year has been estimated and used as the exposed to risk. These women have, however, been classified by their age at maternity in the usual way.

Table XXVII. Extra-maritally conceived maternities per 1,000 unmarried women at risk (see text), 1938 and 1952 to 1960, England and Wales

Age of mother	1938	1952–54 average	1955	1956	1957	1958	1959	1960
15–	11·8	15·5	16·5	19·0	20·2	21·2	21·7	24·0
20–	32·6	42·5	44·0	48·6	50·3	52·2	54·2	58·0
25–	24·5	37·3	39·5	42·2	45·4	47·4	50·5	59·2
30–	15·1	30·7	30·8	34·3	36·8	37·9	40·8	46·0
35–	10·4	18·0	18·6	20·4	21·9	22·0	22·1	24·2
40–	4·3	6·1	6·5	6·8	7·1	7·3	7·9	9·6
15–44 ..	18·6	25·3	26·1	28·9	30·3	31·4	32·5	35·5
Ratio to 1938 Crude ..	1·00	1·36	1·40	1·55	1·63	1·69	1·75	1·91
Standardised by age ..	1·00	1·41	1·47	1·63	1·71	1·78	1·84	2·03

The rates for all extra-maritally conceived maternities are highest for women in their twenties. The separate age rates for illegitimate maternities and pre-maritally conceived legitimate maternities in 1960 are shown in the following statement:

Group of maternities	Age at maternity					
	Under 20	20–	25–	30–	35–	40–44
Illegitimate	6·79	18·84	33·62	33·52	18·60	7·59
Pre-maritally conceived legitimate	17·17	38·64	24·64	11·85	5·26	1·92

The rates for the pre-maritally conceived legitimate maternities rise rapidly to a peak in the 20–24 age-group and then decline steadily with age. The rates for illegitimate births rise and fall more gradually with a lower maximum between

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25 and 34; in the 40–44 age-group the rate is nearly four times that of the pre-maritally conceived legitimate maternities.

In recent years there has been a noticeable increase in the number of illegitimate and pre-maritally conceived legitimate maternities and also in the relevant rates. Table XXVIII below shows the proportionate increase in the legitimate and the extra-maritally conceived maternity rates by age of mother at maternity.

Table XXVIII. Ratio of legitimate and extra-maritally conceived maternity rates to those of 1952 taken as 1,000, 1952 to 1960, England and Wales

Age at maternity	1952	1953	1954	1955	1956	1957	1958	1959	1960
	Legitimate maternities								
All ages under 45	1,000	1,020	1,006	996	1,039	1,070	1,092	1,100	1,142
Under 20 ..	1,000	1,023	991	946	992	1,001	1,026	1,026	1,091
20–24	1,000	1,022	1,010	1,000	1,036	1,056	1,073	1,073	1,085
25–29	1,000	1,027	1,018	1,026	1,082	1,117	1,135	1,140	1,174
30–34	1,000	999	948	934	966	993	1,008	1,013	1,067
35–39	1,000	994	992	981	1,004	1,018	996	955	995
40–44	1,000	986	977	925	917	900	874	890	983
	Extra-maritally conceived maternities								
All ages under 45	1,000	1,016	1,032	1,048	1,161	1,217	1,261	1,305	1,414
Under 20 ..	1,000	1,033	1,067	1,100	1,267	1,347	1,413	1,447	1,600
20–24	1,000	1,029	1,073	1,068	1,180	1,221	1,267	1,316	1,396
25–29	1,000	1,008	992	1,059	1,131	1,217	1,271	1,354	1,563
30–34	1,000	1,020	997	1,007	1,121	1,203	1,239	1,333	1,484
35–39	1,000	972	1,022	1,028	1,127	1,210	1,215	1,221	1,320
40–44	1,000	1,000	1,016	1,066	1,115	1,164	1,197	1,295	1,557

This table shows that while the legitimate maternity rate for all ages under 45 was 14 per cent higher in 1960 than in 1952 the rate for extra-maritally conceived maternities under 45 was 41 per cent higher. (Of the two elements making up the extra-maritally conceived group the illegitimate maternity rate has risen by 50 per cent between 1952 and 1960 and the rate for pre-maritally conceived births has risen by 37 per cent in the same period.) The extra-maritally conceived maternity rate tended to rise slowly between 1952 and 1955 after which the rise became more rapid up to 1959 and the rate for 1960 exhibits a sharp rise above the 1959 rate. This pattern of change in the extra-maritally conceived maternity rate is similar, though of much greater magnitude, to that for legitimate maternities. Among the age-groups identified in Table XXVIII the increase has been greatest among mothers aged under 20 and 25–29, but it is by no means limited to these age-groups; there have been substantial increases in the extra-maritally conceived maternity rates among mothers aged 35 or over in contrast to the fall in the legitimate maternity rates for these ages between 1952 and 1960.

If the incidence of pre-marital conceptions is measured conventionally by the legitimate maternity rate for duration under 9 months, Table KK shows that the incidence is highest at ages under 20 where the maternity rate for the first 9 months is as high as for the remaining quarter of the first year. This rate then falls steeply to the 20–24 age-group and more slowly thereafter.

Age of mother and duration of marriage

The total number of legitimate births and the corresponding rates per 1,000 married women aged 15–44 irrespective of age of mother and duration of marriage were shown in Table XXIV. As fertility declines with advancing age of mother and lengthening duration of marriage, these factors must now be taken into account.

Among the legitimate maternities which occurred in England and Wales in 1960, 6 per cent were to mothers aged under 20, 62 per cent were to mothers aged between 20 and 30, nearly 30 per cent to mothers aged between 30 and 40 and nearly 3 per cent to mothers aged 40 or over. The distribution in five year age-groups is shown in the following statement:

	Age of mother at maternity							
Legitimate maternities in each age-group per 1,000 legitimate maternities at all ages ..	All ages	Under 20	20–24	25–29	30–34	35–39	40–44	45 and over
	1,000	57	305	315	195	100	26	2

A similar distribution of legitimate maternities in England and Wales during 1960 by duration of marriage shows that 56 per cent of all legitimate maternities in 1960 were to mothers whose marriage had lasted less than 5 years (over 13 per cent of legitimate maternities were to mothers who had been married for less than a year) and 84 per cent to mothers married for less than 10 years.

	Marriage duration in completed years								
Legitimate maternities at each duration per 1,000 legitimate maternities at all durations ..	All durations	0	1	2	3	4	5–9	10–14	15–19	20 and over
	1,000	135	119	108	103	92	280	116	37	10

In Table II the legitimate maternities to women married once only are classified by both age of mother at maternity and the duration of her marriage. Using the mean numbers exposed to risk by current age and marriage duration published in Table JJ, corresponding rates by current age and duration of marriage have been computed and published in Table KK. The rates shown in Table KK are summarised for recent years in Table XXIX which shows the typical pattern of decline with increasing age, as well as with each year of duration after the first. The apparent exception at the longest durations within some lines, mainly for the age-group under 20, is due to the fact that towards the right-hand edge of the table the group becomes confined to fewer single years of age, corresponding to the very youngest *marriage* ages. In this part of a detailed table by single years of age, fertility rates change more rapidly with marriage age than with duration, and the number of women at the individual ages making up the group increases very quickly with age.

Table XXIX. Legitimate maternity rates for women married once only by age and marriage duration, 1952 to 1960, England and Wales*

Age at maternity	Year	Marriage duration (completed years)										
		All durations	0	1	2	3	4	5–9	10–14	15–19	20–24	25 and over
All ages under 50	1952–55	·088	·280	·260	·222	·203	·180	·115	·048	·019	·006	·001
	1956	·092	·292	·267	·230	·215	·192	·122	·051	·020	·006	·001
	1957	·094	·300	·274	·237	·220	·201	·127	·053	·021	·006	·001
	1958	·096	·308	·279	·245	·227	·207	·131	·054	·021	·005	·001
	1959	·097	·312	·281	·252	·229	·207	·132	·054	·021	·006	·001
	1960	·101	·327	·288	·258	·243	·217	·138	·057	·022	·006	·001
Under 20	1952–55	·415	·460	·323	·339	·354	—	—	—	—	—	—
	1956	·406	·454	·314	·315	·333	—	—	—	—	—	—
	1957	·408	·453	·329	·317	·356	—	—	—	—	—	—
	1958	·415	·465	·332	·317	·324	—	—	—	—	—	—
	1959	·416	·468	·330	·331	·342	—	—	—	—	—	—
	1960	·436	·497	·333	·338	·370	—	—	—	—	—	—
20–24	1952–55	·253	·272	·278	·246	·237	·222	·205	—	—	—	—
	1956	·259	·277	·283	·250	·245	·229	·217	—	—	—	—
	1957	·263	·281	·288	·254	·248	·234	·218	—	—	—	—
	1958	·267	·286	·291	·263	·250	·239	·218	—	—	—	—
	1959	·267	·288	·292	·269	·251	·232	·213	—	—	—	—
	1960	·272	·296	·297	·270	·262	·240	·214	—	—	—	—
25–29	1952–55	·171	·237	·246	·216	·203	·187	·141	·111	—	—	—
	1956	·180	·247	·255	·226	·216	·199	·152	·113	—	—	—
	1957	·186	·265	·259	·235	·222	·211	·157	·118	—	—	—
	1958	·189	·270	·266	·239	·229	·215	·160	·118	—	—	—
	1959	·188	·270	·268	·248	·230	·217	·159	·121	—	—	—
	1960	·196	·287	·276	·258	·246	·227	·164	·130	—	—	—
30–34	1952–55	·099	·230	·238	·199	·181	·164	·107	·068	·069	—	—
	1956	·100	·247	·245	·210	·190	·173	·110	·066	·063	—	—
	1957	·103	·257	·255	·218	·192	·180	·114	·069	·062	—	—
	1958	·104	·253	·260	·224	·209	·186	·118	·071	·060	—	—
	1959	·105	·256	·268	·228	·209	·189	·119	·072	·061	—	—
	1960	·110	·276	·279	·240	·225	·198	·126	·076	·061	—	—
35–39	1952–55	·049	·167	·183	·148	·133	·124	·079	·042	·035	·041	—
	1956	·050	·175	·195	·152	·144	·132	·082	·045	·035	·035	—
	1957	·051	·184	·200	·158	·144	·130	·085	·046	·035	·036	—
	1958	·050	·179	·193	·165	·145	·130	·084	·046	·035	·035	—
	1959	·049	·188	·207	·170	·150	·135	·084	·046	·033	·033	—
	1960	·050	·198	·210	·178	·151	·138	·087	·048	·033	·035	—
40–44	1952–55	·015	·054	·065	·053	·049	·042	·029	·017	·012	·011	·010
	1956	·014	·054	·075	·059	·049	·042	·030	·017	·012	·010	·008
	1957	·014	·067	·068	·056	·048	·044	·031	·018	·012	·010	·008
	1958	·013	·054	·071	·058	·049	·042	·030	·018	·012	·009	·008
	1959	·013	·067	·074	·059	·057	·046	·031	·017	·011	·009	·007
	1960	·015	·076	·081	·069	·057	·056	·035	·020	·013	·011	·007
45–49	1952–55	·001	·004	·003	·004	·003	·003	·002	·002	·001	·001	·001
	1956	·001	·003	·004	·005	·003	·002	·002	·001	·001	·001	·001
	1957	·001	·001	·004	·003	·003	·002	·002	·002	·001	·001	·001
	1958	·001	·005	·003	·004	·005	·003	·002	·002	·001	·001	·001
	1959	·001	·004	·004	·006	·005	·004	·003	·002	·001	·001	·001
	1960	·001	·002	·004	·001	·004	·004	·002	·002	·001	·001	·001

* In calculating these rates the few maternities to women whose stated age and marriage duration implied an age at marriage below the legal minimum of 16 have been excluded.

Table XXIX shows that between 1959 and 1960 there was a general rise in maternity rates for all ages under 45. For all ages combined the increase varied from 4 to just over 6 per cent for the duration groups specified in Table XXIX apart from durations 1 and 2 where there was a rise of about two and a half per cent. For all durations combined the age-groups under 20 and between 25 and 34 showed increases of between four and five per cent while the 20–24 and 35–39 age at maternity groups showed smaller increases of about two per cent. The 40–44 age-group showed much larger proportional increases (15 per cent for all durations combined) but this group makes a contribution of only three per cent to the total number of maternities. The rates for women aged 45 and over are subject to relatively large random fluctuations which conceal any change in fertility.

Age at marriage

An alternative classification of legitimate maternities by age at marriage and year of marriage is given in Table MM (which also shows the number of previous liveborn children); the mean numbers exposed to risk are shown in Table NN and the corresponding rates have been computed and published in Table OO having been converted from maternity rates to live birth or fertility rates. Tables NN and OO relate to the integral duration intervals which ended in 1959–60; e.g. duration 2 completed years covers the interval from the second wedding anniversary (falling in 1959) to the third anniversary (falling in 1960).

Table XXX which is an extract from Tables 2(a)–2(g) in Appendix A (pages 270 to 275) shows fertility rates at selected integral durations by age at marriage. As stated above, the use of integral durations means that the relevant births are spread over two calendar years. Table XXX shows rates for selected periods of maternity from 1947–48 to 1959–60.

Table XXX. Fertility rates by age at marriage for selected durations only. Women married once only, for selected periods, 1947–48 to 1959–60, England and Wales

| Age at marriage | Period | Duration of marriage (completed years) | | | | | | | | | |
		0	1	2	3	4	5	10	15	20	25
All ages under 45 ..	1947–48	·301	·330	·258	·222	·203	·186	·094	·045	·015	—
	1952–53	·273	·266	·224	·201	·178	·153	·067	·026	·009	·001
	1957–58	·298	·277	·237	·222	·204	·177	·072	·030	·008	·001
	1958–59	·320	·279	·251	·226	·208	·180	·073	·030	·008	·001
	1959–60	·333	·285	·252	·234	·207	·184	·074	·030	·009	·000
Under 20	1947–48	·429	·386	·305	·269	·246	·237	·154	·107	·051	—
	1952–53	·437	·318	·281	·258	·221	·193	·107	·069	·038	·009
	1957–58	·420	·326	·284	·263	·251	·219	·116	·060	·034	·007
	1958–59	·433	·327	·295	·265	·250	·222	·117	·055	·032	·006
	1959–60	·439	·331	·297	·267	·235	·221	·116	·057	·032	·005
20–24	1947–48	·311	·348	·269	·234	·217	·199	·109	·054	·018	—
	1952–53	·253	·267	·224	·206	·185	·162	·074	·032	·011	·001
	1957–58	·268	·270	·237	·225	·209	·186	·078	·033	·008	·001
	1958–59	·275	·272	·248	·229	·214	·189	·078	·034	·008	·000
	1959–60	·313	·276	·246	·237	·216	·192	·080	·033	·008	·000
25–29	1947–48	·272	·317	·245	·205	·187	·164	·081	·025	·004	—
	1952–53	·227	·257	·216	·185	·173	·155	·049	·012	·001	—
	1957–58	·265	·269	·224	·215	·193	·162	·057	·012	·001	—
	1958–59	·275	·272	·247	·222	·200	·165	·057	·012	·001	—
	1959–60	·277	·280	·251	·231	·196	·172	·056	·012	·001	—
30–34	1947–48	·191	·277	·205	·170	·143	·121	·029	·006	·000	—
	1952–53	·217	·240	·190	·160	·130	·101	·016	·002	·000	—
	1957–58	·243	·247	·198	·164	·141	·114	·019	·001	—	—
	1958–59	·247	·250	·212	·162	·142	·107	·020	·001	—	—
	1959–60	·264	·257	·206	·177	·138	·112	·021	·001	—	—
35–39	1947–48	·125	·183	·122	·086	·062	·043	·004	—	—	—
	1952–53	·132	·155	·110	·079	·050	·034	·002	—	—	—
	1957–58	·167	·167	·106	·076	·048	·035	·001	—	—	—
	1958–59	·175	·165	·120	·083	·052	·036	·001	—	—	—
	1959–60	·181	·179	·128	·081	·060	·036	·001	—	—	—
40–44	1947–48	·038	·051	·030	·016	·008	·005	—	—	—	—
	1952–53	·039	·033	·025	·007	·006	·003	—	—	—	—
	1957–58	·041	·039	·024	·010	·004	·002	—	—	—	—
	1958–59	·055	·035	·021	·013	·008	·002	—	—	—	—
	1959–60	·053	·045	·020	·011	·006	·002	—	—	—	—

This table demonstrates differential fertility by age at marriage. Women who marry under the age of 20 have fertility rates which are markedly higher than those for all marriage ages combined at all durations; there is a difference of nearly one fifth up to duration 5 and this difference tends to increase at longer durations where increasing age at maternity must tend to reduce the fertility of

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the older age-at-marriage groups. The 20–24 age-at-marriage group differs little from the average for all ages at marriage combined, as is to be expected since this group accounts for over half the first marriages in most years; nevertheless, there is a tendency for their fertility rates to be a little lower than average at short durations and a little higher than average at the longer durations. With the older age-at-marriage groups, age at maternity comes to play an increasing part in influencing fertility rates which consequently decrease rapidly with increasing duration. Limiting this comparison to durations up to 5, where the age at maternity effect will have less influence, the 25–29 age-at-marriage group fertility rates at these durations are only about 6 per cent below average, the 30–34 age-at-marriage group rates are just over three quarters of the average and the 35–39 group rates are just over 44 per cent of the average for all age at marriage under 45 combined.

The general rise in fertility rates between 1958–59 and 1959–60 has affected the under 20 age-at-marriage group less than for all age-at-marriage groups combined, while the effect on those married between 25 and 40 has been that their fertility rates have risen more than the average.

Among the durations identified in Table XXX the rates for durations 10 and over show relatively little change while the rates for the shorter durations have risen for most age-at-marriage groups. The rates for the first year of marriage (duration 0) have shown a marked rise, especially for those married at ages 20–24 and the increases between 1958–59 and 1959-60 have also tended to be high for durations 1, 3 and 5 while durations 2 and 4 show relatively little change.

Cohort analysis

A proper appreciation of fertility trends needs more than the examination of fertility rates by year of maternity. It is necessary to take women married in a particular period, and to follow them through their reproductive lives. Such a group is generally called a *cohort*, and the study of fertility records in this form, *cohort analysis*. Cohort analysis can help to avoid the misleading impression which may be made by the births of any one period such as a year when either family size or the timing of births is changing.

Tables of mean family sizes and fertility rates for women married once only have been computed for each marriage cohort since 1920 and appear in Appendix A (pages 264 to 269). The mean family size tables (Tables 1(a) to 1(g)) show the average number of liveborn children after each single year of marriage duration separately for each age-at-marriage group. The set of fertility rate tables (Tables 2(a) to 2(g)) show the average annual increments by which the mean family size has been built up. The two sets of tables have been produced each year by using the lines of Tables OO and PP as diagonal additions to data produced by linking data from the 1946 Sample Family Census of the Royal Commission on Population, the 1951 Census of England and Wales and the annual vital registration records.*

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* For the technical problems involved and the methods used see *Census 1951, England and Wales: Fertility Report*, Chapter IV, Appendix I. H.M.S.O., 1959, price £4 10s. 0d. net.

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Table XXXI. Mean family size of selected cohorts since 1929 by age at, and duration of, marriage, England and Wales

Age at marriage	Cohort	Duration of marriage (exact years)									
		1	2	3	4	5	6	11	16	21	26
All ages under 45	1929	·37	·63	·82	·98	1·13	1·26	1·72	1·96	2·06	2·08
	1934	·34	·59	·77	·94	1·08	1·21	1·67	1·95	2·02	2·03
	1939	·25	·47	·65	·82	·99	1·14	1·74	1·95	2·03	—
	1944	·29	·58	·83	1·05	1·24	1·39	1·85	2·06	—	—
	1949	·33	·62	·84	1·04	1·22	1·38	1·89	—	—	—
	1954	·32	·58	·81	1·03	1·24	1·42	—	—	—	—
	1959	·37	—	—	—	—	—	—	—	—	—
Under 20	1929	·65	·95	1·20	1·41	1·60	1·77	2·50	3·00	3·33	3·42
	1934	·64	·94	1·18	1·38	1·58	1·76	2·48	3·09	3·32	3·39
	1939	·43	·70	·93	1·12	1·32	1·51	2·35	2·77	2·99	—
	1944	·38	·68	·96	1·23	1·46	1·65	2·28	2·63	—	—
	1949	·48	·84	1·12	1·38	1·60	1·81	2·52	—	—	—
	1954	·47	·78	1·06	1·32	1·57	1·79	—	—	—	—
	1959	·47	—	—	—	—	—	—	—	—	—
20–24	1929	·41	·70	·90	1·08	1·24	1·39	1·92	2·22	2·36	2·37
	1934	·37	·63	·84	1·02	1·18	1·31	1·85	2·19	2·29	2·30
	1939	·24	·47	·66	·84	1·03	1·20	1·87	2·12	2·20	—
	1944	·28	·58	·85	1·08	1·28	1·44	1·94	2·17	—	—
	1949	·32	·62	·84	1·04	1·23	1·40	1·94	—	—	—
	1954	·28	·54	·76	·99	1·20	1·40	—	—	—	—
	1959	·35	—	—	—	—	—	—	—	—	—
25–29	1929	·26	·50	·68	·83	·96	1·09	1·46	1·61	1·65	1·65
	1934	·25	·48	·65	·80	·94	1·06	1·45	1·62	1·65	1·65
	1939	·20	·40	·57	·74	·90	1·04	1·57	1·71	1·73	—
	1944	·26	·55	·79	1·00	1·17	1·31	1·71	1·84	—	—
	1949	·29	·56	·76	·95	1·12	1·26	1·70	—	—	—
	1954	·28	·54	·76	·98	1·18	1·35	—	—	—	—
	1959	·33	—	—	—	—	—	—	—	—	—
30–34	1929	·28	·49	·63	·75	·84	·92	1·13	1·16	1·16	1·16
	1934	·25	·44	·58	·71	·80	·88	1·08	1·14	1·14	1·14
	1939	·23	·41	·55	·67	·80	·91	1·20	1·23	1·23	—
	1944	·26	·51	·72	·89	1·03	1·13	1·34	1·37	—	—
	1949	·26	·50	·68	·84	·97	1·08	1·31	—	—	—
	1954	·30	·53	·72	·88	1·02	1·14	—	—	—	—
	1959	·34	—	—	—	—	—	—	—	—	—
35–39	1929	·28	·40	·50	·54	·58	·60	·66	·66	—	—
	1934	·26	·40	·49	·55	·59	·62	·65	·66	—	—
	1939	·19	·31	·38	·45	·50	·52	·60	·60	—	—
	1944	·20	·37	·49	·58	·63	·67	·70	·70	—	—
	1949	·21	·37	·48	·55	·61	·64	·68	—	—	—
	1954	·23	·40	·50	·58	·63	·67	—	—	—	—
	1959	·27	—	—	—	—	—	—	—	—	—
40–44	1929	·18	·20	·21	·22	·22	·22	·24	—	—	—
	1934	·28	·32	·34	·35	·36	·36	·36	—	—	—
	1939	·10	·13	·14	·15	·15	·15	·16	—	—	—
	1944	·13	·18	·21	·22	·23	·23	·23	—	—	—
	1949	·14	·18	·20	·21	·22	·22	·22	—	—	—
	1954	·15	·19	·22	·22	·23	·23	—	—	—	—
	1959	·16	—	—	—	—	—	—	—	—	—

Table XXXI shows the achieved mean family size at selected durations for selected cohorts; these figures have been taken from the full series in Tables 1(a)–1(g) of Appendix A in order to illustrate the main features of this series of tables. The basic characteristic of these tables is a decline in family size up to the period of the Second World War and a slight tendency to rise since then. In Table XXXI the slight fall between the cohorts of 1929 and 1934 is typical of the pre-war period. The 1939 cohort experience illustrates the effect of the war at the short durations in creating a relative deficiency which was more than made up at higher durations so that its family size at higher durations is slightly higher than for the earlier cohorts identified. The 1944 cohort passed through the period of buoyant fertility after the Second World War but there are signs that the later cohorts may be moving towards even higher family sizes.

There are some noticeable variations from the pattern shown by the figures for all marriage ages under 45 combined when the separate age-at-marriage groups are considered. For example, for those married under the age of 20 the families of the wartime cohorts (1939 and 1944) lag behind those of pre-war cohorts at the short durations but unlike the combined group for all ages at marriage, this deficiency has not been made up at the higher durations; the family size of the 1949 cohort was back to the pre-war level for those married under 20, but so far the 1954 cohort appears to be lagging behind the 1949 cohort in family size although the difference seems to be decreasing.

In general the 20–24 age-at-marriage group follows the pattern for all marriage ages combined, but among those married between the ages of 25 and 34 the post-war cohorts in Table XXXI have consistently higher family sizes than the pre-war cohorts (including 1939). The effect of the Second World War is most marked in the older age-at-marriage groups where because of higher age at maternity those affected by the war at short durations (the 1939 cohort in Table XXXI) had less opportunity to make up at longer durations for the low fertility which was general during the war.

The cumulative effect of the recent rise in fertility rates at short durations is illustrated by Table XXXII which shows for all marriage ages combined the ratio of the mean family sizes achieved by recent cohorts at short durations to that reached by the 1949 cohort at the same duration.

Table XXXII. Ratio of mean family size of marriage cohorts 1949–59 at short duration to those of 1949 cohort taken as 1,000, all marriage ages under 45, England and Wales

Cohort	Marriage duration (exact years)										
	1	2	3	4	5	6	7	8	9	10	11
1949 ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1951 ..	928	921	943	956	966	978	988	996	999	—	—
1953 ..	949	933	965	987	1,007	1,022	1,034	—	—	—	—
1955 ..	982	957	996	1,021	1,039	—	—	—	—	—	—
1956 ..	1,012	984	1,033	1,059	—	—	—	—	—	—	—
1957 ..	1,018	990	1,039	—	—	—	—	—	—	—	—
1958 ..	1,051	1,018	—	—	—	—	—	—	—	—	—
1959 ..	1,120	—	—	—	—	—	—	—	—	—	—

The effect of the higher short duration fertility rates is illustrated first by the manner in which the 1953 and 1955 cohorts, which started off with lower family sizes than the 1949 cohort, have by the latest durations shown in Table XXXII more than made up their deficiency, and second by the high family sizes at the short durations for the most recent cohorts.

Ultimate family size

For the early cohorts shown in Tables 1(a)—1(g) of Appendix A the ultimate family size is known but the women married since 1930 have not yet all completed their childbearing and to estimate their mean ultimate family size projections have been made from 1960. The first projection shown in Table XXXIII assumes that future fertility rates by marriage age and duration will be equal

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to the mean of those experienced in 1951–55; the second uses similar rates equal to the mean of those experienced in 1959–60. The 1959–60 figures are lower than the 1951–55 figures for marriage cohorts before 1951 and higher for more recent cohorts. The element of projection (though not of course the margin of error) amounts to between 10 and 20 per cent of the total for marriages of 1947–49 and to 20 per cent or more for more recent marriages, the figures gradually becoming more speculative. Whichever assumption is used the projected mean ultimate family sizes are unlikely to be appreciably in error for marriages of 1944 or earlier.

Table XXXIII. Mean ultimate family size of marriage cohorts since 1861, all marriage ages under 45, England and Wales

Calendar year of marriage	Mean ultimate family size (*actual*)	Calendar year of marriage	Mean ultimate family size (*actual*)	Calendar year of marriage	Projected mean ultimate family size *using fertility rates for*	
					1951–55	1959–60
1861–69	6·16	1910	2·95	1930	2·09	2·09
		1911	2·83	1931	2·08	2·08
1871	5·94	1912	2·80	1932	2·08	2·08
		1913	2·81	1933	2·06	2·06
1876	5·62	1914	2·73	1934	2·04	2·04
1881	5·27	1915	2·43	1935	2·04	2·04
		1916	2·43	1936	2·01	2·01
1886	4·81	1917	2·44	1937	2·02	2·02
		1918	2·45	1938	2·06	2·06
1890–99	4·13	1919	2·57	1939	2·05	2·05
1900–09	3·30	1920	2·47	1940	1·99	1·99
		1921	2·38	1941	2·03	2·03
		1922	2·28	1942	2·08	2·07
		1923	2·23	1943	2·14	2·13
		1924	2·21	1944	2·18	2·17
		1925	2·17	1945	2·18	2·16
		1926	2·14	1946	2·19	2·17
		1927	2·09	1947	2·20	2·19
		1928	2·08	1948	2·21	2·20
		1929	2·08	1949	2·22	2·21
				1950	2·32	2·31
				1951	2·21	2·23
				1952	2·24	2·27
				1953	2·27	2·31
				1954	2·27	2·34
				1955	2·28	2·38

It is necessary to bear in mind that the rise in ultimate family size projected for the most recent cohorts may be a product of the method of projection which implicitly assumes, by the use of current fertility rates for all durations, that the rates at longer durations will be unaffected by the high fertility at short durations.

Diagram 4 shows the mean ultimate family size (actual or projected) of marriage cohorts since 1861, using the assumptions based on 1951–55 fertility rates for the recent cohorts.

Diagram 4
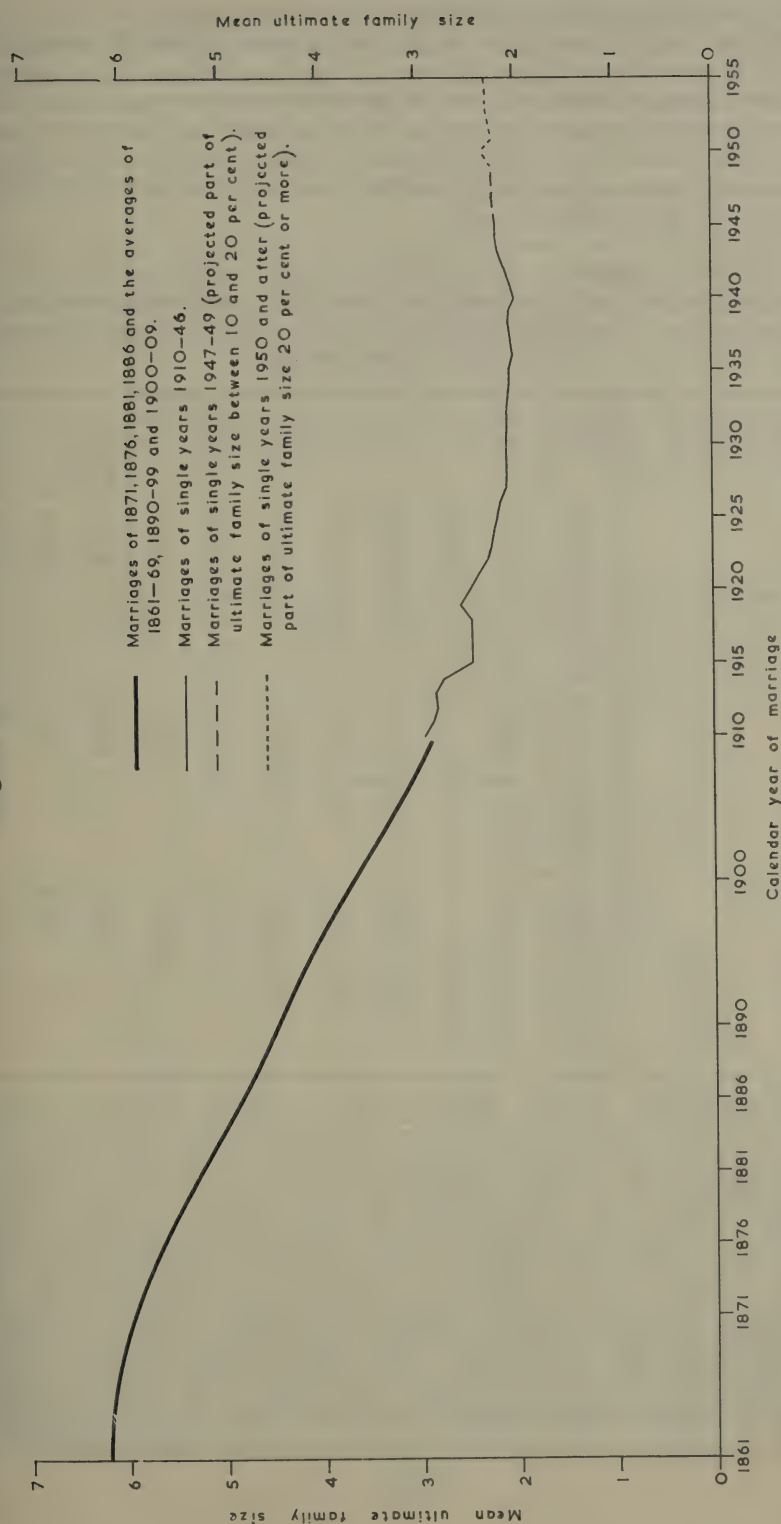
Mean ultimate family size of marriage cohorts since 1861, all marriage ages under 45, England and Wales

Marriages of 1871, 1876, 1881, 1886 and the averages of 1861—69, 1890—99 and 1900—09.

Marriages of single years 1910—46.

Marriages of single years 1947—49 (projected part of ultimate family size between 10 and 20 per cent).

Marriages of single years 1950 and after (projected part of ultimate family size 20 per cent or more).

Mean ultimate family size

Calendar year of marriage

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With the relative stability of fertility rates at longer durations already noted, whether the basis of projection is the fertility rates of 1951–55 or those of 1959–60 makes relatively little difference to marriage cohorts before 1951 but for later marriage cohorts the use of the 1959–60 fertility rates gives mean ultimate family sizes rather higher than those derived from the 1951–55 rates. Table XXXIV below shows the proportion of mean ultimate family size (actual or projected) achieved by a given duration; the fertility rates of 1959–60 have been used for the projected element.

Table XXXIV. Proportion of ultimate family size (actual or projected) for women married once only at selected durations (exact years) and selected ages at marriage groups. Completed family size = 1,000. Selected years of marriage, 1929–1959, England and Wales

Age at marriage	Cohort	Duration at marriage (exact years)									
		1	2	3	4	5	6	11	16	21	26
All ages under 45	1929	178	303	394	471	543	606	827	942	990	1,000
	1934	167	289	378	461	529	593	819	956	990	1,000
	1939	122	229	317	400	483	556	849	951	990	—
	1944	134	267	382	484	571	641	852	949	—	—
	1949	149	280	380	471	552	624	855	—	—	—
	1954	137	248	346	440	530	607	—	—	—	—
	1955	139	252	349	445	534	—	—	—	—	—
	1956	140	251	354	453	—	—	—	—	—	—
	1957	139	253	355	—	—	—	—	—	—	—
	1958	141	254	—	—	—	—	—	—	—	—
	1959	147	—	—	—	—	—	—	—	—	—
Under 20	1929	190	278	351	412	468	518	731	877	974	1,000
	1934	188	276	347	406	465	518	729	909	976	997
	1939	140	228	303	365	430	492	766	902	974	—
	1944	131	234	330	423	502	567	784	904	—	—
	1949	150	263	351	433	502	567	790	—	—	—
	1954	146	242	329	410	488	556	—	—	—	—
	1955	141	241	328	412	484	—	—	—	—	—
	1956	142	242	334	418	—	—	—	—	—	—
	1957	142	242	334	—	—	—	—	—	—	—
	1958	145	247	—	—	—	—	—	—	—	—
	1959	145	—	—	—	—	—	—	—	—	—
25–29	1929	158	303	412	503	582	661	885	976	1,000	—
	1934	152	291	394	485	570	642	879	982	1,000	—
	1939	116	231	330	428	520	601	908	988	1,000	—
	1944	140	297	427	540	632	708	924	995	—	—
	1949	157	303	411	514	605	681	919	—	—	—
	1954	141	273	384	495	596	682	—	—	—	—
	1955	148	282	396	505	604	—	—	—	—	—
	1956	151	283	405	517	—	—	—	—	—	—
	1957	155	285	406	—	—	—	—	—	—	—
	1958	158	292	—	—	—	—	—	—	—	—
	1959	158	—	—	—	—	—	—	—	—	—

From the section of Table XXXIV relating to women married at all ages under 45, it can be seen that in general a little over a half of the ultimate family size is achieved by the fifth wedding anniversary and that by the eleventh anniversary between 80 and 85 per cent of the ultimate family size has been achieved. Among the cohorts shown in Table XXXIV, those up to and including 1949 have similar timing patterns, apart from the disturbance caused by the Second World War which retarded the family building of the 1939 cohort—this slowing down was, however, made up by duration 11. For the most recent cohorts the figures in the table would appear to suggest that they may be building their families more slowly than the earlier cohorts; it seems more likely, however, that this apparent effect is due to the assumed ultimate family size being too high (for these recent cohorts this ultimate family size is mainly composed of the cumulated 1959–60 duration fertility rates). If the

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1951–55 fertility rates are used for the projection element the final diagonal of the under 45 section of Table XXXIV would be replaced by the following figures:

Cohort..	1959	1958	1957	1956	1955	1954
Duration	1	2	3	4	5	6
	159	273	377	476	557	628

As would be expected, the women who married under the age of 20 are slightly slower to build up their families because of their longer effective childbearing period; by their eleventh wedding anniversary they have achieved between 70 and 80 per cent of their ultimate family size compared with between 80 and 85 per cent for women married at all ages under 45 and about 90 per cent for those married at age 25–29. The effect of the Second World War on the timing pattern of the 1939 cohort is visible in both the age-at-marriage groups identified in Table XXXIV.

Replacement

Reproduction rates

The *gross reproduction rate* is a measure of annual fertility which is standardised for the detailed sex-age composition of the population. It is calculated by summing the female age fertility rates (live female births per woman in each age-group) multiplied by the width of the age-groups used. Values of the gross reproduction rate for the period 1841–1960 are shown in Table XXXV.

Table XXXV. Gross and net reproduction rates 1841 to 1960, England and Wales

Year	G.R.R.	N.R.R.	Year	G.R.R.	N.R.R.
3-year averages			Individual years or annual averages		
1841	2·237	1·349			
1851	2·264	1·381	1938	0·897	0·805
1861	2·277	1·427	1939–49	1·031	0·945
1871	2·356	1·511	1950–54	1·061	1·015
1881	2·252	1·511	1955	1·077	1·038
1891	1·973	1·369	1956	1·146	1·107
1901	1·702	1·238	1957	1·190	1·149
1911	1·428	1·121	1958	1·221	1·182
1923	1·153	0·966	1959	1·230	1·190
1933	0·862	0·756	1960	1·291	1·252

The *net reproduction rate* (also shown in Table XXXV) differs from the gross rate by being discounted for the mortality of the period. At one time the N.R.R. was widely used, not as an index of the births and deaths of the year but as a measure of the implications of current family building habits and mortality for the ultimate replacement of the population. In this sense it is now discredited, because it would imply unrealistic and even inconsistent assumptions, at least in societies where family limitation is practised. The N.R.R. is subject to many of the temporary influences which affect annual numbers of births. The figures are shown here for the convenience of those who like to keep serial records in this form.

Marriage standardised replacement rate

The conventional net reproduction rate described above can be improved by taking into account marriage as well as fertility and mortality. Even reproduction rates refined in this way, if they relate to a year or similar period, are subject to distortions and fluctuations when the time-pattern of family building is changing though ultimate family size may be constant.

Nevertheless, it is possible to calculate a hypothetical replacement rate assuming that a given set of marriage, fertility, widowhood and divorce rates will continue. If cohort analysis indicates that such rates represent a stable pattern then such replacement rates may be taken to summarise the habits of the generations and cohorts currently passing through the reproductive period. In the *Fertility Report* of the 1951 Census a generation replacement rate was calculated by multiplying the age-duration fertility rates for 1951–55 by the population of women in a female nuptiality table for England and Wales which was specific by duration of marriage. This gave a female generation replacement rate, according to female nuptiality, of 1·01. If replacement rates are to be constructed on several different assumptions or more frequently, a less laborious method than that outlined above is needed. An abridged nuptiality table was constructed to produce the number of marriages in five-year age-groups from an original generation of 100,000 females. These numbers of married women were then multiplied by the mean ultimate family size appropriate to each marriage age to give the expected number of live births in the second generation. Multiplying this total by the sex ratio at birth produced the expected number of female births and hence *a marriage standardised replacement rate*. An abridged calculation of this kind gives, for the rates of 1951–55, results very close to those of the complete calculation but this is only because the omitted elements such as curvature of marriage rates, mortality between 15 and 50, dissolution of marriages by death, widowhood and divorce and the differential fertility of the re-married largely compensate for each other.

The above marriage standardised replacement rate was calculated on the assumption that some stability had been reached in both marriage and fertility rates. Since 1956, however, marriage rates at younger ages have continued to rise and fertility rates have also risen. It is interesting to repeat the above calculation using an abridged nuptiality table for 1960 and mean ultimate family sizes based on the fertility rates of 1959–60 in order to see the effect of the continued· operation of these rates. The outline of this calculation is shown in the statement below.

Age at marriage	Marriages in 1960 abridged nuptiality table from an original generation of 100,000 females	Mean ultimate family size based on 1959–60 fertility rates	Expected live births in second generation
15–19	24,568	3·248	79,797
20–24	58,495	2·446	143,079
25–29	8,707	2·088	18,180
30–34	2,039	1·511	3,081
35–39	630	0·796	501
40–44	351	0·245	86
	94,790	Expected live births	244,724
		Expected female live births ..	118,856

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This calculation produces a replacement rate of 1·19. In short, in a population which consistently experiences the present high proportions marrying and low mortality, the family size indicated by current trends would be well in excess of that needed for replacement. It should be emphasised that these figures result from a hypothetical calculation summarising current rates which have not yet been experienced throughout the lifetime of any single generation and represent a more favourable experience than that of the generations now nearing completion of their families.

Generation replacement rates

The replacement rate of actual generations since 1838–43 were shown and discussed in the 1956 Commentary (pages 23–24). The number of female births to the 1838–43 generation of women, the last before the spread of family limitation, was about 40 per cent above replacement level. Then followed a decline in the replacement rate until, with the 1903–08 generation, it was 30 per cent short of the number needed for replacement. Since then the rate has been rising and, if present trends continue, will reach replacement with the generation born in 1943–48 or a little earlier if marriage rates continue above the 1951–55 level.

The rate of the rise has been slowing down and there are no clear indications at present that it will carry the rate very much higher. The greater part of the recovery in the level of the replacement rates since the 1903–08 generation has been due to improved mortality (mainly in infancy) and higher marriage rates, and in both these respects there is now limited scope for further improvement.

Birth order

The legitimate maternities of the year are tabulated by birth order as well as mother's age at maternity in Table HH. In 1960, 38 per cent of all births were first births, 31 per cent second, 16 per cent third and 16 per cent fourth or later births, a distribution which differs little from that of earlier years.

Table MM gives a threefold classification by mother's age at marriage, duration of marriage and birth order and makes it possible to investigate the share of births of different orders in the recent rise in fertility rates. True birth order rates would relate, say, the second maternities of mothers married in 1953 at age 20–24 to the estimated number of women in that group who have so far had one child. It has not yet been possible to carry out the considerable work of making a series of such estimates in line with those of mean family size in the 1955 Commentary. In the meantime a series of rates has been computed relating the live births* of each calendar year from 1952 to 1960, classified by birth order, to *all* the women married for the first time in the same marriage year and marriage age as the mothers concerned. In effect, the marriage age/cohort rates of Table OO (style of 1952–55, but live births) have been subdivided by birth order in proportion to Table MM. The rates for 1960 are shown in Appendix B on pages 276–277. The rates for all ages under 45 combined are means of the age rates weighted by the original number of spinster marriages in each cohort and age-group and index numbers of these all-ages rates are shown in Table XXXVI for durations up to 15 and for duration 20. Figures are not shown for 1953–57 which follow the pattern established by the figures shown in Table XXXVI, but figures for these years appeared in the 1957 Commentary, pages 21–23.

* Maternities converted by the appropriate coefficients.

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Table XXXVI. Ratios of fertility rates by birth order (live births per woman married once only, irrespective of parity) to those of 1952 taken as 100, all marriage ages under 45, 1952 and 1958 to 1960, England and Wales

Mean marriage duration (years)	Calendar year of marriage	Calendar year of maternity	Number of previous children					
			Total	0	1	2	3	4 and over
⅓	1952	1952	100			100		
	1958	1958	117			117		
	1959	1959	116			116		
	1960	1960	125			125		
1	1951	1952	100	100		100		
	1957	1958	110	108		138		
	1958	1959	111	109		146		
	1959	1960	113	111		153		
2	1950	1952	100	100	100		100	
	1956	1958	106	98	120		117	
	1957	1959	106	96	124		122	
	1958	1960	110	98	134		126	
3	1949	1952	100	100	100		100	
	1955	1958	112	109	117		106	
	1956	1959	117	110	124		116	
	1957	1960	121	108	131		129	
4	1948	1952	100	100	100	100	100	
	1954	1958	117	119	117	115	101	
	1955	1959	115	113	117	116	107	
	1956	1960	123	116	126	130	123	
5	1947	1952	100	100	100	100	100	
	1953	1958	121	142	118	114	112	
	1954	1959	124	140	119	121	121	
	1955	1960	126	132	122	126	130	
6	1946	1952	100	100	100	100	100	100
	1952	1958	120	155	118	111	106	111
	1953	1959	120	154	118	112	110	108
	1954	1960	126	147	122	122	123	123
7	1945	1952	100	100	100	100	100	100
	1951	1958	119	157	115	111	112	129
	1952	1959	121	156	113	115	117	132
	1953	1960	127	150	121	123	126	142
8	1944	1952	100	100	100	100	100	100
	1950	1958	127	173	124	117	126	130
	1951	1959	120	171	115	112	115	121
	1952	1960	129	167	124	123	128	134
9	1943	1952	100	100	100	100	100	100
	1949	1958	112	135	105	103	110	131
	1950	1959	123	145	116	115	121	144
	1951	1960	120	141	116	113	118	135
10	1942	1952	100	100	100	100	100	100
	1948	1958	109	121	96	102	118	136
	1949	1959	109	124	92	101	116	147
	1950	1960	126	137	107	118	140	161

Table XXXVI—*continued*

Mean marriage duration (years)	Calendar year of marriage	Calendar year of maternity	Number of previous children					
			Total	0	1	2	3	4 and over
11	1941	1952	100	100	100	100	100	100
	1947	1958	107	100	89	101	115	140
	1948	1959	108	112	89	101	113	144
	1949	1960	115	113	94	109	123	151
12	1940	1952	100	100		100	100	100
	1946	1958	105	85		97	113	142
	1947	1959	108	88		100	114	145
	1948	1960	115	96		108	116	152
13	1939	1952	100	100		100	100	100
	1945	1958	104	96		101	107	111
	1946	1959	106	95		101	104	124
	1947	1960	114	103		108	114	128
14	1938	1952	100	100		100	100	100
	1944	1958	114	105		123	120	110
	1945	1959	113	109		116	116	112
	1946	1960	116	103		122	120	118
15	1937	1952	100	100		100	100	100
	1943	1958	117	118		129	120	109
	1944	1959	117	110		124	123	113
	1945	1960	116	115		127	124	107
20	1932	1952	100			100		
	1938	1958	87			87		
	1939	1959	97			97		
	1940	1960	99			99		

When the births are so finely subdivided there are bound to be many small numbers subject to chance fluctuations and in Table XXXVI births of different orders have therefore been grouped together in such a way that the corresponding cells in Table MM contain at least 1,000 maternities. Even so there are quite a few cells where no significance can be attached to very small movements in the index numbers.

Table XXXVI shows that the rise in births in 1960 compared with 1959 affected most durations up to 20 years. The pattern of changes between these years in birth orders is rather irregular but there appears to be a tendency for the ratios for higher orders at a given duration to rise more than the lower birth order ratios; for a number of durations the ratio of first births has in fact fallen.

Over the period shown in Table XXXVI the first and fifth and higher order birth rates have risen more than the rates for second and third order births at durations 5 to 9. This effect may be partly due to the peculiar structure of these rates in 1952 when the first order rates were depressed because the women married in the period just after the Second World War had their first children more quickly after marriage than later cohorts. By duration 5 to 6 their rates in Appendix B would be smaller than those of following cohorts because there were fewer at risk of having a first child. In the same way fifth and higher order births would be proportionately under-represented among the total births of

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1952 because few of the women married in the period just after the Second World War would be having births of these orders by 1952, to which year the birth rates of subsequent years have been related.

Sex ratio at birth

In 1960 there were 1,061 male live births per 1,000 female live births. Serial records are published in Table C of Part II and separate figures for births by legitimacy are shown in Table XXXVII. The generally rising trend in the proportion of boys during this century can be attributed to the reduction in foetal mortality in this period. This topic was discussed in more detail in the 1959 Commentary.

Table XXXVII. **Male births per 1,000 female births, by legitimacy and whether live or still, 1928 to 1960, England and Wales**

Period	Legitimate births			Illegitimate births		
	Live	Still	Live and still	Live	Still	Live and still
1928–30 ..	1,044	1,231	1,051	1,037	1,280	1,049
1931–35 ..	1,051	1,207	1,057	1,044	1,153	1,049
1936–40 ..	1,054	1,183	1,059	1,050	1,117	1,054
1941–45 ..	1,061	1,158	1,064	1,074	1,173	1,078
1946–50 ..	1,061	1,169	1,063	1,056	1,238	1,061
1951–55 ..	1,059	1,126	1,060	1,061	1,229	1,066
1956 ..	1,057	1,108	1,058	1,055	1,049	1,055
1957 ..	1,061	1,081	1,061	1,049	1,002	1,047
1958 ..	1,059	1,083	1,060	1,055	1,164	1,058
1959 ..	1,063	1,071	1,063	1,069	1,144	1,071
1960 ..	1,061	1,048	1,062	1,048	1,064	1,049

Multiple births

Among the 791,584 maternities in 1960 there were 9,163 with multiple births, 9,086 with twins and 77 with triplets. They produced 17,590 liveborn children and 813 stillborn children. Thus one in 86 of all maternities produced twins and nearly one in ten thousand produced triplets. Details are given in Tables CC and DD.

The number of multiple maternities in a single year is too small for detailed study; the figures would be too much affected by chance fluctuations. A detailed analysis, combining figures for several years, appeared in the 1956 Commentary, pages 33–42.

Seasonal incidence of births

Table XXXVIII shows the quarterly pattern of live births since the 1841–50 decade measured by the ratio of the average number of births per day for each quarter compared with the daily average for the whole year. The daily average has been used, to allow for differences in the length of quarters and months.

Table XXXVIII. Quarterly incidence of live births in relation to the average for the calendar year: ratio of quarterly daily average to that of the calendar year taken as 100: 1841 to 1960, England and Wales

Period	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1841–1850 ..	105	103	96	96
1851–1860 ..	105	104	96	95
1861–1870 ..	104	103	97	96
1871–1880 ..	103	102	98	97
1881–1890 ..	103	102	98	97
1891–1900 ..	102	102	99	97
1901–1910 ..	102	103	100	95
1911–1920 ..	103	102	99	96
1921–1930 ..	102	105	100	93
1931–1935 ..	101	106	101	92
1936–1940 ..	100	106	102	92
1941–1945 ..	100	104	99	97
1946–1950 ..	103	104	99	94
1951–1955 ..	103	105	99	93
1956	102	103	100	95
1957	100	104	99	97
1958	104	102	97	97
1959	105	104	98	93
1960	101	103	100	96

There has been little change in the seasonal pattern over the period shown in Table XXXVIII. The first half of the year has normally accounted for a few per cent more than the average daily births for the whole year and the second half of the year for correspondingly less. Since the beginning of this century the average daily number of births has usually been highest in the second quarter of the year and lowest in the last quarter. The pattern for 1960 returned to that which has prevailed during this century, in contrast to 1958 and 1959 which had their highest daily average in the first quarter.

The quarterly incidence of births for recent years distinguishing legitimate and illegitimate live births is shown in Table XXXIX. This table demonstrates that the quarterly pattern is similar for legitimate and illegitimate live births.

Table XXXIX. Quarterly live birth incidence in relation to the average for the calendar year: ratio of quarterly daily average to that of the calendar year taken as 100: 1939, 1951–55, 1958 to 1960, England and Wales

Period		1939	1951–55 average	1958	1959	1960
		All live births				
1st Quarter ..	..	101	103	104	105	101
2nd ,,	..	107	105	102	104	103
3rd ,,	..	100	99	97	98	100
4th ,,	..	92	93	97	93,	96
		Legitimate live births				
1st Quarter ..	..	101	103	104	105	101
2nd ,,	..	106	105	102	104	103
3rd ,,	..	100	99	97	98	100
4th ,,	..	93	93	97	93	96
		Illegitimate live births				
1st Quarter ..	..	106	104	103	103	97
2nd ,,	..	108	107	101	104	103
3rd ,,	..	99	98	97	99	101
4th ,,	..	87	91	99	94	99

The monthly birth figures in Table TT allow a more detailed study. The ratios of the daily averages in each month to those for the calendar year are contained in Table XL for some recent years.

Table XL. Monthly birth incidence in relation to the average for the calendar year, 1939, 1951–55, 1959 and 1960, England and Wales

Month of occurrence		Ratio of monthly daily average to that of the calendar year taken as 1,000							
		Legitimate live births				Illegitimate live births			
		1939	1951–55	1959	1960	1939	1951–55	1959	1960
January	..	980	994	1,013	953	1,076	998	1,024	917
February	..	995	1,030	1,053	1,036	1,041	1,049	1,029	1,017
March	..	1,041	1,063	1,077	1,057	1,080	1,074	1,050	994
April ..	..	1,073	1,056	1,056	1,022	1,046	1,078	1,039	1,007
May ..	..	1,078	1,065	1,050	1,043	1,138	1,084	1,056	1,050
June ..	..	1,043	1,035	1,014	1,015	1,044	1,056	1,013	1,019
July ..	..	1,025	1,009	1,001	1,004	1,038	1,020	1,017	1,028
August	..	985	968	960	970	960	941	981	976
September	..	1,004	991	990	1,015	969	970	981	1,026
October	..	939	936	959	974	859	890	916	1,004
November	..	914	913	902	956	853	900	914	976
December	..	927	941	928	959	889	950	974	988

For live births Table XL shows that the daily average is normally at a minimum in November, rises sharply until March, remains high until May or June and then declines again except for a minor rise in September (corresponding to December conceptions).

After the disturbance in the seasonal pattern in 1958 and 1959, 1960 showed a return to more normal conditions with generally high ratios of monthly to annual figures from February to June (with particularly high figures in March and May). There was less monthly variation in 1960 than in 1959; the extreme values of the ratios in Table XL were rather closer than in 1959.

The seasonal pattern of ratios to the calendar year average such as those shown in Table XL is disturbed if the trend of births is not constant. Such distortion can be eliminated by relating the average daily number of births for the month, not to the average for the year, but to the trend value for that particular month. This comparison has been made for the period since 1957 and the results are shown in Table XLI and illustrated in Diagram 5.

Table XLI. Monthly incidence of legitimate live births in relation to the trend, 1957 to 1960, England and Wales

The ratios were calculated before rounding off the mean numbers

Month of occurrence	Mean numbers of legitimate live births per day								Ratio of actual to trend value			
	Actual				Trend							
	1957	1958	1959	1960	1957	1958	1959	1960	1957	1958	1959	1960
January	1,841	1,933	1,972	1,932	1,844	1,914	1,946	1,981	0·998	1·010	1·013	0·975
February.. ..	1,941	1,987	2,050	2,101	1,852	1,917	1,948	1,988	1·048	1·036	1·052	1·056
March	1,990	2,103	2,095	2,143	1,861	1,920	1,951	1,996	1·069	1·095	1·074	1·074
April	1,971	2,028	2,055	2,072	1,870	1,923	1,953	2,003	1·054	1·055	1·052	1·035
May	1,991	2,010	2,044	2,115	1,880	1,926	1,955	2,011	1·059	1·043	1·046	1·052
June	1,935	1,891	1,974	2,058	1,890	1,930	1,958	2,018	1·024	0·980	1·008	1·020
July	1,840	1,815	1,949	2,035	1,897	1,933	1,960	2,025	0·970	0·939	0·994	1·005
August	1,819	1,835	1,868	1,967	1,901	1,935	1,961	2,033	0·957	0·948	0·953	0·968
September ..	1,904	1,942	1,927	2,059	1,904	1,937	1,963	2,040	1·000	1·003	0·982	1·009
October	1,861	1,883	1,866	1,976	1,908	1,939	1,966	2,047	0·975	0·971	0·949	0·965
November ..	1,758	1,848	1,755	1,877	1,910	1,941	1,970	2,055	0·920	0·952	0·891	0·913
December ..	1,802	1,893	1,807	1,945	1,912	1,944	1,975	2,062	0·942	0·974	0·915	0·943

When seasonal variation has been eliminated it can be seen that there was an upward trend throughout the whole of this period. The trend rose a little more steeply in the second half of 1960 than in the first part of the year.

Birth rates in different parts of the country

The numbers of live births by sex and legitimacy and the crude birth rates for all administrative areas in England and Wales with summary figures for regions, conurbations and urban and rural aggregates are shown in Table E of Part II. This table also includes an Area Comparability Factor for each area by which the crude birth rates can be standardised for the sex and age structure of the local population. The ratio of the local rate thus adjusted to the national birth rate is also published in Table E. Comparison of birth rates in regions, conurbations and urban and rural aggregates appeared in the 1959 Commentary (pages 65–68).

Diagram 5
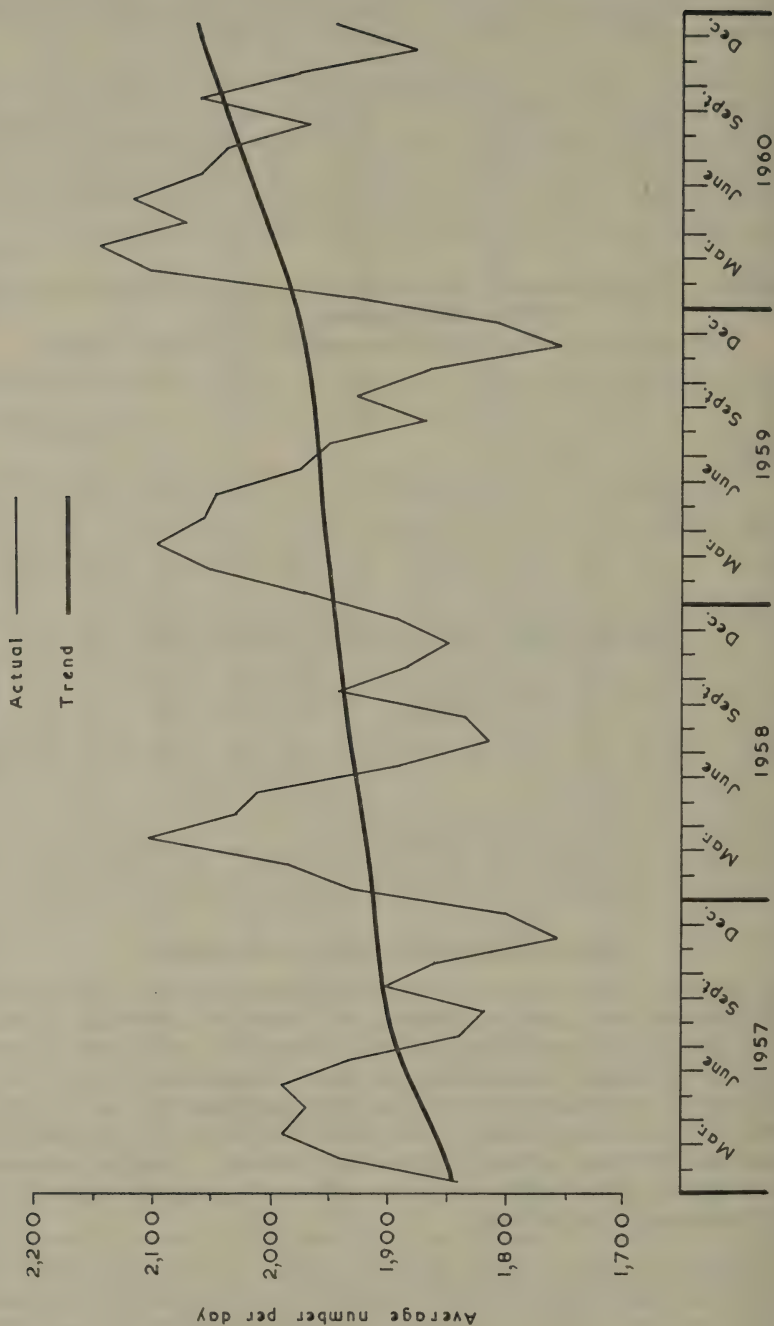
Average number per day

Monthly incidence of legitimate live births in relation to the trend, 1957 to 1960, England and Wales

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GENERAL MORTALITY

Statistical tables showing the mortality experience of 1960 in England and Wales published in Part I of the Review are supplemented by tables with certain calculated rates in this Commentary. It is the purpose of this chapter to draw attention to the more important figures and trends disclosed in the tables.

Crude death rate

In 1960 there were 526,268 deaths. When these are related to the *home* population actually resident in England and Wales on 30th June 1960, they give a crude death rate of 11·5 deaths per thousand persons of all ages.

There has been little change in the crude death rate for the 40 years since 1920 when the rate was 12·4 per thousand; in this period it has fluctuated between 14·4 per thousand in 1940 and 11·0 per thousand in 1948. There appear to be only two major influences which cause marked fluctuation in the number of deaths in a given year; these are either a severe sharp cold spell, or an outbreak of influenza. A fog occurring over a wide area may cause an increase in the weekly death rates but does not appear to have a major influence on the annual mortality. 1960 was a fortunate year in these respects. The winter quarter January to March was milder than usual and consistently so; in only one week was there a cold spell and even in this period, January 10th to January 16th, the mean daily temperature at Kew was 33·6° F. (1° C.) and there were no severe fogs. The autumn of this year, October to December, was warm, a temperature of 54° F. (12° C.) being recorded at Kew on 4th December 1960 and there were no persistent fogs.

Epidemic influenza was also a notable absentee during this year as is shown in the table below:

Deaths assigned to pneumonia (ICD Nos. 490–493) and influenza (ICD Nos. 480–483) by quarters, England and Wales, 1958 to 1960

	1958		1959		1960	
	Pneumonia	Influenza	Pneumonia	Influenza	Pneumonia	Influenza
January–March ..	9,766	1,891	12,734	6,902	8,014	508
April–June	5,027	226	5,044	659	5,701	262
July–September ..	3,166	43	3,303	60	3,968	51
October–December	5,779	241	5,509	241	6,660	277

It is the usual experience that when deaths assigned to influenza show a marked increase, those assigned to pneumonia show a similar increase above their normal seasonal average. It will be seen that in 1960 not only was there no influenza epidemic but there was no sharp increase above the seasonal normal of deaths assigned to pneumonia. These fortunate circumstances helped to make the crude death rate of 11·5 per thousand the lowest since 1957.

Standardised Mortality Ratio

Although the crude death rate has remained relatively constant for many years, this does not by any means imply that there has not been a steady improvement in the mortality rates. The crude death rate is influenced by two

major factors: the age specific death rates on the one hand, and the actual age structure of the population on the other. Over the whole of this period there has been a steady decline in death rates at most ages, but at the same time there has been an increase in the average age of the population. There are two principal ways of eliminating the effect of increasing age; the first is by the technique of the Standardised Mortality Ratio which is described in detail in the Explanatory Notes in Part I of the *Review**, the second is to examine separately each of the age specific death rates. Table 3 shows that the death rates of 1960 were the most favourable experienced in England and Wales since death registration was instituted. Allowing for differences in sex and age, the Standardised Mortality Ratio shows that if 1950–52 were taken as 100, 1960 was 89. Thus in the decade which has elapsed since 1950, there has been an effective decline of 11 per cent in mortality.

This finding should not be accepted complacently. The fact that this trend has been continuing for over a century is no reason for believing that continued improvement is inevitable. On the contrary, it may prove difficult to maintain the level achieved in 1960 since there appears to be little room for further reduction in the mortality attributed to infectious diseases.

Age specific death rates

It is particularly interesting to examine the individual death rates at various ages of life to see whether this improvement has been uniform over all ages and both sexes. The following table compares the death rates at various ages in 1950 with those in 1960 and shows the percentage change that has occurred in this decade.

Death rates per 1,000 population, England and Wales, 1950 and 1960

Age			Males			Females		
			1950	1960	1960 as per cent of 1950	1950	1960	1960 as per cent of 1950
0–1†	..	..	34	25	74	26	19	73
1–4	..	..	1·42	0·95	67	1·27	0·78	61
5–9	..	..	0·75	0·53	71	0·53	0·34	64
10–14	..	..	0·56	0·38	68	0·41	0·26	63
15–19	..	..	1·01	0·91	90	0·78	0·36	46
20–24	..	..	1·39	1·17	84	1·09	0·44	40
25–34	..	..	1·69	1·12	66	1·45	0·73	50
35–44	..	..	2·92	2·41	83	2·32	1·73	75
45–54	..	..	8·26	7·17	87	5·30	4·35	82
55–64	..	..	22·5	21·4	95	12·6	10·6	84
65–74	..	..	53·3	52·5	98	34·7	29·5	85
75–84	..	..	122·5	119·6	98	96·6	84·4	87
85 and over	..		250·4	232·1	93	216·9	210·4	97

† Deaths under 1 year of age per 1,000 live births.

It is necessary to bear in mind that a comparison is being made between two single years and some of the differences could be affected by epidemic causes.

* *The Registrar General's Statistical Review, 1960, Part I, Tables, Medical.* H.M.S.O., price £1 2s. 6d. net.

It is apparent that the 11 per cent improvement in overall death rates indicated by the Standardised Mortality Ratio is very unevenly spread both as between sexes and between ages. At all age-groups except 85 and over there has been a greater improvement in the female death rates than in the male, although in every age-group the female death rate in 1950 was already lower than the male rate. It is also apparent that there has been greater improvement at the younger ages than at the older. In particular, the death rate for females between the ages of 1 year and 35 years has been halved in this single decade. Because 1950 was a post-war year in which there were no particularly adverse features, this is a most remarkable occurrence. On the other hand there has been almost no improvement in the death rates of males over the age of 55.

One age-group in particular appears to have failed to benefit. Adolescent males age 15–19 have a death rate of 91 per 100,000 compared with 101 per 100,000 in 1950. The very small decline in the death rate of these young men may be attributed almost entirely to an increase in deaths arising from motor vehicle traffic accidents. The figures show that deaths of male motorcyclists age 15–19 (ICD Nos. E814, E815, E821) increased from 110 in 1950 to 450 in 1960, while other motor vehicle traffic accident deaths increased from 124 to 185.

Ages of man

The same disease at different ages may produce very different symptoms, different complications, different social implications, different modes of death. It is therefore of interest, both from a demographic and medical point of view, to examine mortality at the various ages of man. The most meaningful separation of the various age-groups is not on a chronological basis but on a physiological one, yet unfortunately this is impractical from the statistical point of view. A compromise has accordingly been adopted in the age groupings used in the following analysis.

For purposes of contrast the difference between two successive years is too small to highlight significant trends, whereas if a contrast is made over a long interval of time other social, medical or statistical changes have taken place to alter the significance of the differences found. In this analysis 1960 is compared with 1950. Both are post-war years, both are subsequent to the introduction of the National Health Service, both had full employment and both had good weather. In this decade, too, there were only minor changes in the statistical classification of diseases due to the Seventh Revision of the International Classification which came into operation in 1958.

Stillbirths

Although stillbirths have been registrable events since 1927 it was only in October 1960, under the Population (Statistics) Act, 1960, that the causes of these late foetal deaths have been required to be stated. Figures for the last three months of 1960 have been published in the *Registrar General's Quarterly Return* for the December Quarter 1960, and later figures will be included in Part I of the Review from 1961 onwards.

The improvement in late foetal deaths has not been spectacular during the last decade. The reduction from 22·6 deaths per 1,000 live and still births in 1950 to 19·8 is a decline of 12 per cent but it should be noted that all of this

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improvement has taken place during the last 3 years, 1958–1960. It seems possible that some of these foetal deaths have been counted with the deaths occurring within the first day of life, since these deaths have increased slightly.

Infant mortality—age under 1 year

The infant mortality rate continues to improve and the rate in 1960 with 17,118 deaths was the lowest ever experienced at 21·8 per 1,000 live births. This is almost exactly one half of the rate immediately after the war, when it was 42·9 in 1946. It is important, however, that over the decade the greatest improvement in mortality has been at the older ages between 1 month and 1 year, but this tendency has altered in the last three years and the rate at the older ages is steady, whereas the neonatal rate is showing some slight improvement. The types of disease causing death during pregnancy or in the first week of life are very different in type and aetiology from those causing death after extra-uterine life has been firmly established and they have proved much more intractable to prevention and cure.

Death rates per 1,000 live births,
England and Wales, 1950 and 1960

Age at death			Death rate 1950	1960	Improvement per cent
Late foetal deaths†	..	..	22·6	19·8	12
First day..	..	..	7·2	7·5	(−4)
2nd–6th day	..	..	8·0	5·8	28
1–3 weeks	..	..	3·3	2·2	33
1–2 months	..	..	4·3	2·5	42
3–5 months	..	..	3·7	2·1	43
6–11 months	..	..	3·1	1·6	48

† Rate per 1,000 live and still births.

Five principal causes of death account for over 80 per cent of all infant deaths:

Deaths of infants under 1 year,
England and Wales, 1960

Cause of death			Number	Per cent
Congenital malformations	..	..	3,549	20·7
Immaturity	..	..	3,068	17·9
Respiratory diseases	..	..	2,887	16·9
Atelectasis	..	..	2,676	15·6
Birth injury	..	..	1,825	10·7

*Congenital malformations** accounted for 3,549 deaths in the first year of life or 21 per cent of all such deaths as compared with 3,036 deaths or 15 per cent in 1950. 1,369 of these deaths were due to malformations of the central nervous system, many of which were incompatible with life, and death took

* The subject of congenital malformations is treated more fully at pages 172–183 of the 1959 Commentary. Owing to staff changes it has been necessary to defer the study of regional variations in infant mortality from this cause.

place during the first week.   Malformations of the cardiovascular system, however, accounted for 1,359 deaths and many of these deaths occurred later in the first year of life, so it is apparent that with improved facilities for cardiac surgery there is still room for considerable advance in this field.

Immaturity was mentioned as a primary cause of death in 3,068 deaths, which was 18 per cent of all infant deaths, and was mentioned as being associated with death in 3,301 other cases or 19 per cent.   Hence, in general, the major contribution towards saving neonatal deaths would be a fuller understanding of the causes of immaturity and preventive action to reduce them.

Respiratory diseases accounted for 2,887 deaths, of which 2,408 (14 per cent of all infant deaths) were attributed to pneumonia.   The fact that the infant mortality from pneumonia in winter is twice the summer rate suggests that there may be scope for the improved care of pneumonia cases.   In addition, the rate for all respiratory disease in the north of England of 4·53 per 1,000 was almost double that occurring in the south east (excluding Greater London) of 2·67 per 1,000.   This suggests that there may be room for preventive and therapeutic action to bring the northern rates to the lower levels prevailing in the south east.

Atelectasis and *postnatal asphyxia* caused 2,676 deaths of which 2,593 were during the first week of life.   This cause of death has remained fairly constant at a rate of about 3·40 per 1,000 live births during the decade.

Birth injuries have shown a decline in the last decade, but they still account for 1,825 infant deaths of which 1,750 occurred within a week of birth.

Despite the very great advance made in reducing infant mortality in the last 20 years, there is still room for improvement and, if the rate for the country as a whole could be reduced to a level equal to that already achieved in the south east (excluding Greater London), approximately 2,400 lives would be saved a year.

Pre-school child age 1–4

In this age-group there were 2,431 deaths in 1960 compared with 4,087 a decade previously.

The decline in *tuberculosis* deaths has been most remarkable.   In 1950 there were 489 deaths attributed to various forms of tuberculosis; in 1960 there were 15 and in particular tuberculous meningitis declined from 356 to 9.   This can be attributed to three causes: the removal and isolation of known sources of infection, B.C.G. inoculation of those exposed to risk, and chemotherapy available for those attacked.   Provided there is further improvement in all these methods, especially so far as children are concerned, there is reason to believe that it will not be long before tuberculosis is all but eliminated as a cause of childhood death.

Mortality from *other infectious diseases* also declined, but the most striking decline was in *poliomyelitis* where deaths fell from 116 in 1950 to 3 in 1960. The remainder of the infectious diseases caused 123 deaths in 1960 of which *meningococcal infections* caused 31, *acute infectious encephalitis* 24, *measles* 19 and *infectious hepatitis* 12.

Neoplasms have now emerged as a relatively important cause of loss in childhood, not because of an increase but because they have remained fairly stable. In 1950 there were 352 neoplastic deaths between ages 1 and 4; in 1960, 301.

Table XLII. Deaths and death rates per 100,000 living from principal causes by sex and age, 1950 and 1960, England and Wales

Cause and ICD No.	Age 1–4							
	Number of deaths				Death rate per 100,000			
	1950		1960		1950		1960	
	Males	Females	Males	Females	Males	Females	Males	Females
Infective and parasitic diseases (001–138)								
Tuberculosis (001–019)	253	236	8	7	16	16	0·6	0·5
Tuberculosis of meninges and C.N.S. (010)	175	181	5	4	11	12	0·3	0·3
Measles (085)	71	44	10	9	4·6	3·0	0·7	0·7
Acute poliomyelitis (080)	70	46	1	2	4·5	3·1	0·07	0·1
Remainder of 001–138	158	161	52	52	10	11	3·6	3·8
All infective and parasitic diseases (001–138)	552	487	71	70	36	33	4·9	5·1
Neoplasms (140–239)								
Kidney (180)	28	20	18	16	1·8	1·4	1·3	1·2
Leukaemia and aleukaemia (204)	78	64	70	63	5·0	4·3	4·9	4·6
Brain, malignant (193)	20	21	29	30	1·3	1·4	2·0	2·2
Brain, non-malignant (223, 237)	9	13	9	5	0·6	0·9	0·6	0·4
Remainder of 140–239	56	43	32	29	3·6	2·9	2·2	2·1
All neoplasms (140–239)	191	161	158	143	12	11	11	10
Diseases of the nervous system and sense organs (330–398)								
Meningitis, except meningococcal and tuberculous (340)	31	27	31	19	2·0	1·8	2·2	1·4
Encephalitis, myelitis and encephalomyelitis (except acute infectious) (343)	14	5	7	14	0·9	0·3	0·5	1·0
Cerebral spastic infantile paralysis (351)	11	7	12	11	0·7	0·5	0·8	0·8
Epilepsy (353)	16	34	25	22	1·0	2·3	1·7	1·6
Remainder of 330–398	52	43	39	29	3·4	2·9	2·7	2·1
All diseases of the nervous system and sense organs (330–398)	124	116	114	95	8·0	7·9	7·9	7·0
Diseases of the circulatory system (400–468)								
All diseases of the circulatory system (400–468)	25	12	8	14	1·6	0·8	0·6	1·0
Diseases of the respiratory system (470–527)								
Lobar pneumonia (490)	38	28	10	11	2·5	1·9	0·7	0·8
Bronchopneumonia (491)	257	263	167	142	17	18	12	10
Acute bronchitis (500)	39	34	45	30	2·5	2·3	3·1	2·2
Chronic bronchitis (502)	4	1	8	1	0·3	0·07	0·6	0·07
Remainder of 470–527	125	88	96	49	8·1	6·0	6·7	3·6
All diseases of the respiratory system (470–527)	463	414	326	233	30	28	23	17
Diseases of the digestive system (530–587)								
Appendicitis (550–553)	48	38	11	11	3·1	2·6	0·8	0·8
Gastro-enteritis and colitis except ulcerative (571)	71	51	57	34	4·6	3·5	4·0	2·5
Remainder of 530–587	56	51	30	33	3·6	3·5	2·1	2·4
All diseases of the digestive system (530–587)	175	140	98	78	11	9·5	6·8	5·7
Diseases of the genito-urinary system (590–637)								
Nephritis and nephrosis (590–594)	28	27	11	10	1·8	1·8	0·8	0·7
Remainder of 590–637	9	7	7	6	0·6	0·5	0·5	0·4
All diseases of the genito-urinary system (590–637)	37	34	18	16	2·4	2·3	1·3	1·2
Congenital malformations (750–759)								
Congenital malformations of circulatory system (754)	59	69	83	84	3·8	4·7	5·8	6·1
Remainder of 750–759	70	86	102	84	4·5	5·8	7·1	6·1
All congenital malformations (750–759)	129	155	185	168	8·3	10	13	12
All other diseases (remainder 001–795)								
All other diseases (rem. 001–795)	88	61	49	60	5·7	4·1	3·4	4·4
All accidents, poisonings and violence (E800–E999)								
Motor vehicle traffic accidents (E810–E825)	156	103	110	67	10	7·0	7·6	4·9
Accidental falls (E900–E904)	19	16	18	12	1·2	1·1	1·3	0·9
Accident caused by fire and explosion of combustible material (E916)	21	44	26	37	1·4	3·0	1·8	2·7
Accidental drowning and submersion (E929)	101	33	83	20	6·5	2·2	5·8	1·5
Remainder of E800–E999	126	104	98	56	8·1	7·0	6·8	4·1
All accidents, poisonings, and violence (E800–E999)	423	300	335	192	27	20	23	14
ALL CAUSES	2,207	1,880	1,362	1,069	142	127	95	78

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The majority of deaths were caused by neoplasms in three sites, kidney 34, brain (malignant and non-malignant) 73, and leukaemia 133.

Inflammatory disease of the central nervous system remained a potent killer of the pre-school child, causing 142 deaths as shown in the table below:

Cause of death and ICD No.			Deaths in 1960
Meningococcal infections (057)	..	..	31
Infectious encephalitis (082, 083)	..	..	24
Meningitis (340)	..	..	..	50
Encephalitis (343, 344)	..	..	..	37

In addition there were eleven deaths assigned to *chickenpox, mumps, influenza* and *other infectious diseases* where *encephalitis* was a secondary cause of death. Full details of these deaths will be found in Table CVI (page 209).

The commonest cause of death at this age was diseases of the *respiratory system* with 559 deaths, of which bronchopneumonia caused 309, whilst other respiratory diseases were responsible for 250 deaths. A substantial reduction in the number of deaths from this cause should be possible, especially by the use of improved chemotherapeutic drugs.

Accidents with 527 deaths were the second most important group of causes, and of these motor vehicle traffic accidents were responsible for 177 and drowning accidents for 103. Even at this age the ratio of boys to girls who died of drowning was 4 to 1.

Only in the case of deaths due to fire was the sex ratio to the disadvantage of the girls. This is undoubtedly a reflection of the continued availability and use of inflammable clothing and nightdresses. It is worth recalling that, in his letter to the Registrar General in the 1839–40 Annual Report, Dr. Farr wrote:—

" In the metropolis, in two years, 142 males and 285 females, died by burns! This is to be ascribed to the greater combustibility of the dresses of females: their caps and gowns frequently take fire. Many children are burnt from the same cause. It deserves the consideration of manufacturers, whether cotton and linen may not be made, by a chemical solution, as little liable to take fire as textures of wool."

" The immense number of deaths by drowning (about 2,400 annually) arises, in part, from the neglect of the art of swimming, even by persons who are frequently on deep waters."

The school child age 5–14

At this age death rates have always been at their lowest point in the life of man. Nevertheless, there has continued to be a remarkable decline at these ages. The total deaths in 1960 were 2,615 compared with 3,341 in 1950.

Tuberculosis, as at the younger ages, was almost eradicated. There were only 11 deaths attributable to all forms of tuberculosis and of these 6 were attributed to tuberculous meningitis. A decade previously the figures had been 294 and 186.

Poliomyelitis deaths almost disappeared, the deaths falling from 154 to 5.

Table XLII—*continued*

Cause and ICD No.	Age 5–14							
	Number of deaths				Death rate per 100,000			
	1950		1960		1950		1960	
	Males	Females	Males	Females	Males	Females	Males	Females
Infective and parasitic diseases (001–138)								
Tuberculosis of meninges and C.N.S. (010)	96	90	2	4	3·2	3·1	0·06	0·1
Other tuberculosis (001–009, 011–019) ..	55	53	1	4	1·8	1·8	0·03	0·1
Acute poliomyelitis (080, 081)	82	72	3	2	2·7	2·5	0·08	0·06
Measles (085)	21	10	—	4	0·7	0·3	—	0·1
Infectious encephalitis (082, 083)	5	7	9	6	0·2	0·2	0·3	0·2
Meningococcal infections (057)	11	6	1	6	0·4	0·2	0·03	0·2
Remainder of 001–138	72	38	35	22	2·4	1·3	1·0	0·7
All infective and parasitic diseases (001–138)	342	276	51	48	11	9·5	1·4	1·4
Neoplasms (140–239)								
Kidney (180)	2	10	8	14	0·07	0·3	0·2	0·4
Leukaemia and aleukaemia (204)	72	69	128	81	2·4	2·4	3·6	2·4
Brain, malignant (193)	39	31	70	41	1·3	1·1	2·0	1·2
Brain, non-malignant (223, 237)	20	17	5	16	0·7	0·6	0·1	0·5
Remainder of 140–239	78	58	81	71	2·6	2·0	2·3	2·1
All neoplasms (140–239)	211	185	292	223	7·0	6·4	8·2	6·6
Diseases of the nervous system and sense organs (330–398)								
Vascular lesions affecting central nervous system (330–334)	14	4	23	15	0·5	0·1	0·6	0·4
Cerebral spastic infantile paralysis (351) ..	6	4	11	8	0·2	0·1	0·3	0·2
Epilepsy (353)	29	31	27	30	1·0	1·1	0·8	0·9
Remainder of 330–398	47	34	36	30	1·6	1·2	1·0	0·9
All diseases of the nervous system and sense organs (330–398)	96	73	97	83	3·2	2·5	2·7	2·5
Diseases of the circulatory system (400–468)								
Rheumatic fever (400–402)	80	68	8	7	2·7	2·3	0·2	0·2
Chronic rheumatic heart disease (410–416)	42	43	4	4	1·4	1·5	0·1	0·1
Remainder of 400–468	41	19	30	19	1·4	0·7	0·8	0·6
All diseases of the circulatory system (400–468)	163	130	42	30	5·4	4·5	1·2	0·9
Diseases of the respiratory system (470–527)								
Lobar pneumonia (490)	14	23	13	5	0·5	0·8	0·4	0·1
Bronchopneumonia (491)	80	49	72	42	2·7	1·7	2·0	1·2
Bronchitis (500–502)	24	13	20	11	0·8	0·4	0·6	0·3
Remainder of 470–527	62	56	37	28	2·1	1·9	1·0	0·8
All diseases of the respiratory system (470–527)..	180	141	142	86	6·0	4·9	4·0	2·5
Diseases of the digestive system (530–587)								
Appendicitis (550–553)	71	47	32	16	2·4	1·6	0·9	0·5
Gastro-enteritis and colitis except ulcerative (571)	8	5	8	8	0·3	0·2	0·2	0·2
Remainder of 530–587	31	32	36	33	1·0	1·1	1·0	1·0
All diseases of the digestive system (530–587)	110	84	76	57	3·7	2·9	2·1	1·7
Diseases of the genito-urinary system (590–637)								
Nephritis and nephrosis (590–594) ..	65	71	41	27	2·2	2·5	1·2	0·8
Remainder of 590–637	9	6	12	11	0·3	0·2	0·3	0·3
All diseases of the genito-urinary system (590–637)	74	77	53	38	2·5	2·7	1·5	1·1
Congenital malformations (750–759)								
Congenital malformations of circulatory system (754)	64	38	86	83	2·1	1·3	2·4	2·5
Remainder of 750–759	39	30	43	45	1·3	1·0	1·2	1·3
All congenital malformations (750–759) ..	103	68	129	128	3·4	2·3	3·6	3·8
All other diseases (remainder 001–795)								
All other diseases (rem. 001–795)	84	73	71	52	2·8	2·5	2·0	1·5
All accidents, poisonings and violence (E800–E999)								
Motor vehicle traffic accidents (E810–E825)	284	138	289	139	9·4	4·8	8·2	4·1
Accidental falls (E900–E904)	48	11	41	12	1·6	0·4	1·2	0·4
Accident caused by fire and explosion of combustible material (E916)	12	33	11	37	0·4	1·1	0·3	1·1
Accidental drowning and submersion (E929)	151	26	150	30	5·0	0·9	4·2	0·9
Remainder of E800–E999	121	47	159	49	4·0	1·6	4·5	1·4
All accidents, poisonings, and violence (E800–E999)	616	255	650	267	20	8·8	18	7·9
ALL CAUSES	1,979	1,362	1,603	1,012	66	47	45	30

Neoplasms are now the second commonest cause of death in the school child. Although there has been an increase in the death rate from 6·7 per 100,000 in 1950 to 7·4 per 100,000 in 1960, it is difficult to be certain whether this is a true increase or whether it should be attributed to a greater accuracy of diagnosis. In view of the growing recognition by the medical profession that neoplasms are a not uncommon cause of death at these ages, more effort is being expended on the search for the neoplastic process, especially in the brain and in the blood. It is possible therefore that the increase in neoplasms of the brain and of leukaemia is attributable to improved diagnosis.

Rheumatic fever, both acute and chronic, was the cause of 23 deaths in 1960, whereas a decade previously the figure was 233. Thus rheumatic fever, like tuberculosis, is almost routed but the attributable causes of the decline are better social conditions as well as improved management and chemotherapy. It is probable that the death rate is matched by an equal fall in the morbidity from chronic rheumatic heart disease and that in future we may expect a great reduction in the morbidity and ultimate mortality from valvular disease and that the sound of the leaking rheumatic mitral valve will become a rarity in medical practice.

Deaths due to *respiratory diseases* were not at all as common at this age as among the pre-school children. But 228 deaths did occur, of which 149 were attributed to pneumonia.

Gastro-intestinal deaths were relatively few, but there were 48 deaths attributable to appendicitis and 34 of these were with peritonitis. The death rate is much higher among boys. The figures also suggest that early diagnosis of this disease continues to prove difficult.

Accidents remain the greatest killer of school children, although there has been some slight improvement in the death rates from these causes.

Death rates at ages 5–14 per 100,000 population

Cause of death	1950		1960	
	Males	Females	Males	Females
All accidents	20·5	8·8	18·3	7·9
Motor vehicle traffic accidents	9·4	4·8	8·2	4·1
Drowning	5·0	0·9	4·2	0·9
Fire	0·4	1·1	0·3	1·1

Great effort is directed towards road safety instruction but in the summer months, especially among boys, drowning is almost as important a cause of death.

As with the pre-school child, it is only in the case of deaths caused by fire that the sex ratio is inverted. No doubt many of these fatalities arise from the continued use of inflammable clothing and nightdresses.

The adolescent and young adult age 15–24

This age range is a mixture both socially and physiologically. Within it the individual passes out of the stress of puberty to become a young adult; indeed, before its close many accept the responsibilities of family life. There is undoubtedly a difference in the mortality experience at these various stages, but it is necessary in this general commentary to aggregate them under one chronological period.

Table XLII—*continued*

Cause and ICD No.	Number of deaths				Death rate per 100,000			
	1950		1960		1950		1960	
	Males	Females	Males	Females	Males	Females	Males	Females
Age 15–24								
Infective and parasitic diseases (001–138)								
Tuberculosis, respiratory (001–008)	446	924	5	8	16	32	0·2	0·3
Tuberculosis of meninges and C.N.S. (010)	56	91	2	7	2·0	3·1	0·07	0·2
Other tuberculosis (011–019)	70	65	5	1	2·5	2·2	0·2	0·03
Acute poliomyelitis (080, 081)	84	81	9	4	3·0	2·8	0·3	0·1
Remainder of 001–138	49	41	22	22	1·7	1·4	0·7	0·7
All infective and parasitic diseases (001–138)	705	1,202	43	42	25	41	1·4	1·4
Neoplasms (140–239)								
Bone (196)	48	23	34	22	1·7	0·8	1·1	0·7
Hodgkin's disease (201)	32	16	50	25	1·1	0·6	1·7	0·8
Leukaemia and aleukaemia (204)	71	47	74	47	2·5	1·6	2·5	1·6
Brain, malignant (193)	23	22	27	22	0·8	0·8	0·9	0·7
Brain, non-malignant (223, 237)	19	20	15	11	0·7	0·7	0·5	0·4
Remainder of 140–239	114	78	113	71	4·0	2·7	3·8	2·4
All neoplasms (140–239)	307	206	313	198	11	7·1	11	6·7
Diseases of the nervous system and sense organs (330–398)								
Vascular lesions affecting central nervous system (330–334)	30	32	40	37	1·1	1·1	1·3	1·3
Cerebral spastic infantile paralysis (351)	7	8	8	6	0·2	0·3	0·3	0·2
Epilepsy (353)	84	52	41	42	3·0	1·8	1·4	1·4
Remainder of 330–398	83	42	40	29	2·9	1·4	1·3	1·0
All diseases of the nervous system and sense organs (330–398)	204	134	129	114	7·2	4·6	4·3	3·9
Diseases of the circulatory system (400–468)								
Rheumatic fever (400–402)	31	40	8	8	1·1	1·4	0·3	0·3
Chronic rheumatic heart disease (410–416)	143	162	47	30	5·0	5·6	1·6	1·0
Remainder of 400–468	88	61	68	43	3·1	2·1	2·3	1·5
All diseases of the circulatory system (400–468)	262	263	123	81	9·3	9·1	4·1	2·7
Diseases of the respiratory system (470–527)								
Lobar pneumonia (490)	33	22	15	10	1·2	0·8	0·5	0·3
Bronchopneumonia (491)	42	39	50	28	1·5	1·3	1·7	0·9
Bronchitis (500–502)	13	20	14	7	0·5	0·7	0·5	0·2
Remainder of 470–527	71	81	47	28	2·5	2·8	1·6	0·9
All diseases of the respiratory system (470–527)	159	162	126	73	5·6	5·6	4·2	2·5
Diseases of the digestive system (530–587)								
Appendicitis (550–553)	54	29	17	11	1·9	1·0	0·6	0·4
Ulcerative colitis (572·2)	9	20	14	11	0·3	0·7	0·5	0·4
Remainder of 530–587	51	37	37	25	1·8	1·3	1·2	0·8
All diseases of the digestive system (530–587)	114	86	68	47	4·0	3·0	2·3	1·6
Diseases of the genito-urinary system (590–637)								
Nephritis and nephrosis (590–594)	113	110	87	53	4·0	3·8	2·9	1·8
Remainder of 590–637	8	21	12	14	0·3	0·7	0·4	0·5
All diseases of the genito-urinary system (590–637)	121	131	99	67	4·3	4·5	3·3	2·3
Deliveries and complications of pregnancy, childbirth and the puerperium (640–689)								
Deliveries and complications of pregnancy, childbirth and the puerperium (640–689)	—	110	—	62	—	3·8	—	2·1
Congenital malformations (750–759)								
Congenital malformations of the circulatory system (754)	66	61	62	51	2·3	2·1	2·1	1·7
Remainder of 750–759	34	21	34	17	1·2	0·7	1·1	0·6
All congenital malformations (750–759)	100	82	96	68	3·5	2·8	3·2	2·3
All other diseases (remainder 001–795)								
All other diseases (rem. 001–795)	132	132	93	68	4·7	4·6	3·1	2·3
All accidents, poisonings and violence (E800–E999)								
Motor vehicle traffic accidents (E810–E825)	637	99	1,302	208	22	3·4	44	7·0
Water transport accidents (E850–E858)	60	1	51	—	2·1	0·03	1·7	—
Accidental falls (E900–E904)	62	5	66	8	2·2	0·2	2·2	0·3
Accidental drowning and submersion (E929)	93	7	75	4	3·3	0·2	2·5	0·1
Suicide and self-inflicted injury (E970–E979)	130	49	170	77	4·6	1·7	5·7	2·6
Remainder of E800–E999	348	72	320	70	12	2·5	11	2·4
All accidents, poisonings, and violence (E800–E999)	1,330	233	1,984	367	47	8·0	67	12
ALL CAUSES	3,434	2,741	3,074	1,187	121	95	103	40

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In the age-group 15–24 there were 4,261 deaths in 1960 (72 per 100,000) compared with 6,175 (108 per 100,000) in 1950, which is a reduction of one-third.

The greater part of this reduction has been concentrated in the deaths attributed to *tuberculosis* where the improvement in the adolescent and young adult has been just as remarkable as has been observed in the children. Deaths assigned to tuberculosis fell from 1,652 in 1950 to 28 in 1960. This represents a reduction of 98 per cent. In the case of *poliomyelitis* the reduction was from 165 deaths in 1950 to 13 in 1960, a reduction of 92 per cent.

Neoplasms accounted for 511 deaths compared with 513 in 1950 (rate for neoplastic deaths 8·6 per 100,000 persons in 1960 and 9·0 per 100,000 in 1950), thus remaining stable.

The more important sites of cancer at this age are the reticulo-endothelial system and the genitalia. Cancers of the kidney and of the brain have become less important while cancers of the lung, stomach, breast, prostate and bowel, which will cause many deaths later in life, have not yet assumed any importance.

Death rates at ages 15–24 per 100,000 population

Cause of death	1950		1960	
	Males	Females	Males	Females
Leukaemia	2·5	1·6	2·5	1·6
Hodgkin's disease	1·1	0·6	1·7	0·8
Brain tumours (malignant and non-malignant)	1·5	1·4	1·4	1·1
Bone tumours	1·7	0·8	1·1	0·7
Genital tumours	0·7	0·5	0·9	0·6
All other neoplasms	3·3	2·2	2·9	1·8
Total	10·8	7·1	10·5	6·7

The constancy of these rates, when it is remembered that they are based upon small numbers, is quite remarkable, the only differences worthy of comment being a slight decline in bone tumours counter-balanced by a similar rise in Hodgkin's disease. This shift could well be explained by improved diagnosis.

Rheumatic fever has declined remarkably: acute rheumatic fever from 71 deaths in 1950 to 16 deaths in 1960, and chronic rheumatic heart disease, which is a function of previous morbidity, from 305 to 77.

Respiratory disease is not so important a cause of death as it is among the children but even here there has been steady improvement: 321 deaths in 1950 against 199 in 1960.

The experience of *appendicitis* is similar to that of the younger ages. It remains an occasional cause of death but deaths have fallen from 83 in 1950 to 28 in 1960.

The increase in deaths arising from *accidents* in this age group, especially among the males, is disappointing. It is also likely that as a result of improved facilities, especially neuro-surgical, and the availability of better antibiotics, the incidence of severe accidents will have risen more than the mortality figures would suggest.

Death rates at ages 15–24 per 100,000 population

Cause of death	1950		1960	
	Males	Females	Males	Females
Motor vehicle traffic accidents (other than motorcycles)..	7·9	2·3	15·1	4·5
Motorcycle accidents ..	14·5	1·1	28·7	2·5
Water traffic accidents	2·1	0·0	1·7	—
Drowning	3·3	0·2	2·5	0·1
Suicide ..	4·6	1·7	5·7	2·6
Other causes ..	14·5	2·7	13·0	2·6
All accidents and violent deaths	47·0	8·0	66·7	12·4

In the decade, deaths due to violence between the ages of 15 and 24 increased by nearly 50 per cent and this increase was almost entirely attributable to *motor vehicle traffic accidents.* These accidents doubled during the ten years and it is observed that among males age 15–24 motor vehicles cause 42 per cent of all deaths attributable to all causes, and that two thirds of these deaths are due to motorcycle accidents. Since many individuals in this age-group will be too young to possess a driving licence and others with marital or family responsibilities will be less likely to expose themselves to unnecessary danger it can be deduced that the mortality among single males 17–21 must be very heavy.

Death by *drowning* also remains a common cause of death among males. The majority of these deaths are caused by immersion of occupants of small boats and by bathing accidents.

Suicide in the young adult is predominantly a male cause of death. This has always been the case but unfortunately there appears to be an increase in such deaths. The mode of death preferred by both males and females who commit suicide is poisoning by gases in domestic use; barbiturates and aspirin are not often effectively used by such individuals at these ages.

The adult age 25–44

Individuals reach full maturity at varying ages but certainly by 25 they have passed the stage of development and growth and have reached full possession of their powers. By the middle forties, however, they are passing into a new physiological state symbolised by the menopause in women but no less significant in the male.

The diseases that cause death in the adult age 25–44 are not essentially different from those of later life but they are different from those of adolescence and childhood. Diseases of the vascular system and neoplasms account for more than half of all deaths, but accidents remain an important part of total mortality.

Infectious diseases have been almost defeated. *Tuberculosis* mortality has fallen from 41·2 per 100,000 in 1950 to 4·1 per 100,000 in 1960, which represents a reduction of 90 per cent. All other infectious diseases accounted for only 189 deaths in 1960, of which *syphilis* contributed 42 and *infectious hepatitis* 33.

Table XLII—*continued*

Cause and ICD No.	Age 25–44							
	Number of deaths				Death rate per 100,000			
	1950		1960		1950		1960	
	Males	Females	Males	Females	Males	Females	Males	Females
Infective and parasitic diseases (001–138)								
Tuberculosis, respiratory (001–008) ..	2,705	2,368	228	203	41	36	3·8	3·3
Tuberculosis, other forms (010–019) ..	222	148	34	31	3·4	2·2	0·6	0·5
Remainder of 001–138	378	261	113	76	5·8	3·9	1·9	1·2
All infective and parasitic diseases (001–138)	3,305	2,777	375	310	50	42	6·2	5·1
Neoplasms (140–239)								
Stomach (151)	384	224	228	148	5·8	3·4	3·8	2·4
Large intestine (153)	178	226	132	157	2·7	3·4	2·2	2·6
Rectum (154)	121	96	80	62	1·8	1·4	1·3	1·0
Lung and bronchus (162, 163)	653	169	568	189	9·9	2·5	9·5	3·1
Breast (170)	3	837	2	712	0·05	13	0·03	12
Cervix uteri (171)	—	304	—	406	—	4·6	—	6·7
Ovary, Fallopian tube and broad ligament (175)	—	253	—	241	—	3·8	—	4·0
Brain, malignant (193)	161	126	193	136	2·5	1·9	3·2	2·2
Brain, non-malignant (223, 237) ..	129	110	50	47	2·0	1·7	0·8	0·8
Hodgkin's disease (201)	141	77	156	80	2·1	1·2	2·6	1·3
Leukaemia and aleukaemia (204) ..	143	131	199	121	2·2	2·0	3·3	2·0
Remainder of 140–239	666	652	673	555	10	9·8	11	9·1
All neoplasms (140–239)	2,579	3,205	2,281	2,854	39	48	38	47
Diseases of the nervous system and sense organs (330–398)								
Vascular lesions affecting central nervous system (330–334)	390	466	473	503	5·9	7·0	7·9	8·3
Remainder of 330–398	498	418	340	285	7·6	6·3	5·7	4·7
All diseases of the nervous system and sense organs (330–398)	888	884	813	788	14	13	14	13
Diseases of the circulatory system (400–468)								
Rheumatic fever (400–402)	54	68	4	6	0·8	1·0	0·07	0·1
Chronic rheumatic heart disease (410–416)	700	1,116	394	594	11	17	6·6	9·8
Heart disease specified as involving coronary arteries (420·1)	989	149	1,672	210	15	2·2	28	3·4
Hypertension without mention of heart (444–447)	112	61	188	80	1·7	0·9	3·1	1·3
Remainder of 400–468	644	581	406	342	9·8	8·7	6·8	5·6
All diseases of the circulatory system (400–468)	2,499	1,975	2,664	1,232	38	30	44	20
Diseases of the respiratory system (470–527)								
Lobar pneumonia (490)	165	112	70	35	2·5	1·7	1·2	0·6
Bronchopneumonia (491)	193	215	162	133	2·9	3·2	2·7	2·2
Bronchitis (500–502)	287	154	212	93	4·4	2·3	3·5	1·5
Remainder of 470–527	509	307	212	124	7·7	4·6	3·5	2·0
All diseases of the respiratory system (470–527)	1,154	788	656	385	18	12	11	6·3
Diseases of the digestive system (530–587)								
Ulcer of stomach (540)	161	40	56	22	2·5	0·6	0·9	0·4
Ulcer of duodenum (541)	220	26	84	13	3·3	0·4	1·4	0·2
Ulcerative colitis (572·2)	52	85	24	36	0·8	1·3	0·4	0·6
Remainder of 530–587	402	309	211	174	6·1	4·6	3·5	2·9
All diseases of the digestive system (530–587)	835	460	375	245	13	6·9	6·2	4·0
Diseases of the genito-urinary system (590–637)								
Nephritis and nephrosis (590–594) ..	486	423	300	158	7·4	6·4	5·0	2·6
Remainder of 590–637	70	137	73	114	1·1	2·1	1·2	1·9
All diseases of the genito-urinary system (590–637)	556	560	373	272	8·5	8·4	6·2	4·5
Deliveries and complications of pregnancy, childbirth and the puerperium (640–689)								
Deliveries and complications of pregnancy, childbirth and the puerperium (640–689)	—	492	—	245	—	7·4	—	4·0
Congenital malformations (750–759)								
Congenital malformations of circulatory system (754)	142	126	68	64	2·2	1·9	1·1	1·1
Remainder of 750–759	71	61	62	34	1·1	0·9	1·0	0·6
All congenital malformations (750–759) ..	213	187	130	98	3·2	2·8	2·2	1·6
All other diseases (remainder 001–795)								
All other diseases (rem. 001–795)	461	609	293	316	7·0	9·2	4·9	5·2
All accidents, poisonings and violence (E800–E999)								
Motor vehicle traffic accidents (E810–E825)	848	119	1,022	224	13	1·8	17	3·7
Water transport accidents (E850–E858) ..	59	—	48	1	0·9	—	0·8	0·02
Accidental falls (E900–E904)	207	28	155	23	3·2	0·4	2·6	0·4
Accidental drowning and submersion (E929)	112	19	95	24	1·7	0·3	1·6	0·4
Suicide and self-inflicted injury (E970–E979)	637	369	764	435	9·7	5·5	13	7·1
Remainder of E800–E999	898	148	669	190	14	2·2	11	3·1
All accidents, poisonings and violence (E800–E999)	2,761	683	2,753	897	42	10	46	15
ALL CAUSES	15,251	12,620	10,713	7,642	232	190	179	125

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Neoplasms account for about a quarter of all the deaths in this age range, but it is interesting that even in these diseases there has been a slight decline in deaths from 43·8 per 100,000 in 1950 to 42·5 in 1960. Within this slight change in total cancers there was concealed a significant change in the individual sites. *Cancer of the gastro-intestinal tract* declined from 1,515 deaths in 1950 to 1,072 deaths in 1960 (the rate per 100,000 persons in this age range was 11·5 in 1950 and 8·9 in 1960). *Cancer of the stomach* at these ages declined from 608 deaths to 376.

Cancer of the lung and bronchus was almost stationary *in this age-group* throughout the decade; in 1950 the rate was 6·2 per 100,000 persons while in 1960 it was 6·3. This figure does, however, conceal a shift in the incidence of the disease, since the male rate declined from 9·9 to 9·5 whereas the female rate increased from 2·5 to 3·1 per 100,000.

There was also a most disappointing increase in cancer of the *cervix uteri* at these ages, the deaths attributed to this cause rising from 304 deaths in 1950 to 406 deaths in 1960.

Within the general concept of *brain tumours* there was a decline, although within this group there was a shift from non-malignant and unspecified tumours to malignant tumours. It is difficult, however, to ascribe any real significance to this alteration as it seems probably to have been caused by improved diagnosis of malignant tumours of the brain.

The neoplasms of the reticulo-endothelial system showed an increase in the decade; the rates for both Hodgkin's disease and leukaemia rose.

Vascular disease begins to play an important role in the adult age range of 25–44, a role which dominates the next age of man.

Rheumatic heart disease has declined considerably during the decade 1950–60 from 13·7 per 100,000 to 8·2, and acute rheumatism almost disappeared as a cause of death, there being only 10 such deaths at this age in 1960. This has been of especial advantage to females as they were always more liable to die of valvular heart disease during the reproductive years.

There has, however, been a well marked increase in *coronary heart disease* which has been internationally observed. The death rate from this cause for males age 25–44 rose from 15·1 per 100,000 in 1950 to 27·9 in 1960, almost doubling itself. At the same time there was an increase in cerebral vascular accidents. Among males the rate rose from 5·9 to 7·9 and for females from 7·0 to 8·3 per 100,000.

Respiratory and gastro-intestinal diseases declined in importance at these ages. The mortality from peptic ulceration in particular fell from 447 deaths to 175; in the main this is likely to have resulted from improved medical care, rather than from a decline in morbidity from the disease.

Accidents remain an important cause of death among men of these ages; but the rates remain fairly constant, only motor vehicle traffic accidents showing any marked increase. It is to be noted, however, that there has been an increase of 30 per cent in the rate of *suicide* in this age range and that half of these deaths were due to gases in domestic use.

Middle age 45–64

It is impossible to decide what is the middle of life and here the term middle age is used to indicate that period of life that lies in the middle between the climacteric and the onset of senescence.

At this age the death rate begins to increase more steeply and the causes of death are similar to those of the older ages. *Neoplasms* account for 32 per cent of the deaths and *vascular disease* for over 40 per cent and it is at this age that the biological advantage of the female becomes most marked; the death rate for males is 13·4 per thousand and for females 7·2.

Infectious diseases in 1960 accounted for 2,142 deaths at these middle ages and of these 1,483 were due to *tuberculosis*. The decline in the tuberculosis death rate at these ages was not as dramatic as in the case of the younger population; nevertheless it was appreciable, falling from 55·2 per 100,000 in 1950 to 12·6 per 100,000 in 1960.

The neoplastic diseases are now typically those of later life. Cancer of the stomach accounted for 4,444 deaths, large bowel 4,089, breast 4,118, lung and bronchus 11,253 in 1960. The neoplasms of the gastro-intestinal tract show a steady decline over the decade and neoplasms of the breast remain constant, but there has been a startling increase in the neoplasms of the lung and bronchus. This is in marked contrast to the ages under 45 where there has been no such increase. In the 45–64 age-group, however, the death rate for males rose from 125 per 100,000 in 1950 to 176 in 1960, which represents an increase of 41 per cent. In the case of females the rate increased from 15 to 22 per 100,000, or an increase of 47 per cent. This increase in lung cancer deaths more than counterbalances those saved by the reduction in the tuberculosis death rate.

Vascular diseases became most important at these ages and in particular the male rate is more than double that of females at the same age; these rates are summarised below:

Vascular diseases—death rates at ages 45–64 per 100,000 population

Cause of death	Males		Females	
	1950	1960	1950	1960
Vascular lesions of central nervous system ..	108	109	115	96
Coronary heart disease	251	366	67	92
Myocardial degeneration	62	16	47	13
All other vascular diseases	134	112	113	87
All vascular diseases	556	603	342	287

It will be seen that whilst the death rate for males from all vascular diseases has increased, that for females has decreased. It is also apparent that there has been a shift from other vascular diseases to the coronary heart disease. The change in coding between the 6th Revision and the 7th Revision of the International Statistical Classification of Diseases caused only a small transfer of the order of 2 per cent from myocardial degeneration into the coronary artery diseases, but there has been a decline in the male death rate attributable to myocardial degeneration from 62 per 100,000 to 16. A change in diagnostic

Table XLII—*continued*

Cause and ICD No.	Age 45–64							
	Number of deaths				Death rate per 100,000			
	1950		1960		1950		1960	
	Males	Females	Males	Females	Males	Females	Males	Females
Infective and parasitic diseases (001–138)								
Tuberculosis, all forms (001–019)	4,390	1,389	1,166	317	90	25	21	5·1
Remainder of 001–138	837	423	410	249	17	7·6	7·3	4·0
All infective and parasitic diseases (001–138)	5,227	1,812	1,576	566	108	32	28	9·2
Neoplasms (140–239)								
Stomach (151)	2,976	1,648	3,038	1,406	61	29	54	23
Large intestine (153)	1,133	1,535	1,118	1,431	23	27	20	23
Rectum (154)	1,095	755	894	646	23	13	16	10
Breast (170)	23	3,546	18	4,100	0·5	63	0·3	66
Cervix uteri (171)	—	1,370	—	1,155	—	24	—	19
Ovary, Fallopian tube and broad ligament (175)	—	1,360	—	1,537	—	24	—	25
Prostate (177)	451	—	441	—	9·3	—	7·8	—
Lung and bronchus (162, 163)	6,059	866	9,911	1,342	125	15	176	22
Remainder of 140–239	5,225	4,461	6,029	4,779	108	80	107	77
All neoplasms (140–239)	16,962	15,541	21,449	16,396	349	277	381	266
Diseases of the nervous system and sense organs (330–398)								
Vascular lesions affecting central nervous system (330–334)	5,250	6,450	6,155	5,936	108	115	109	96
Remainder of 330–398	819	785	770	781	17	14	14	13
All diseases of the nervous system and sense organs (330–398)	6,069	7,235	6,925	6,717	125	129	123	109
Diseases of the circulatory system (400–468)								
Chronic rheumatic heart disease (410–416)	1,571	2,475	1,165	1,976	32	44	21	32
Heart disease specified as involving coronary arteries (420·1)	12,206	3,765	20,585	5,671	251	67	366	92
Arteriosclerotic heart disease (422·1)	879	695	379	272	18	12	6·7	4·4
Degenerative heart disease (422·2)	2,049	1,800	525	474	42	32	9·3	7·7
Congestive heart failure (434·1)	197	128	451	289	4·1	2·3	8·0	4·7
Hypertensive heart disease (440–443)	1,782	1,568	1,021	739	37	28	18	12
Other hypertensive heart disease (444–447)	532	391	1,040	608	11	7·0	18	9·9
General arteriosclerosis (450)	495	264	239	152	10	4·7	4·2	2·5
Remainder of 400–468	2,059	1,642	2,390	1,621	42	29	42	26
All diseases of the circulatory system (400–468)	21,770	12,728	27,795	11,802	448	227	494	191
Diseases of the respiratory system (470–527)								
Lobar pneumonia (490)	763	348	483	218	16	6·2	8·6	3·5
Bronchopneumonia (491)	1,011	755	1,158	855	21	13	21	14
Bronchitis (500–502)	5,253	1,413	5,568	1,107	108	25	99	18
Remainder of 470–527	2,094	816	1,496	510	43	15	27	8·3
All diseases of the respiratory system (470–527)	9,121	3,332	8,705	2,690	188	59	155	44
Diseases of the digestive system (530–587)								
Ulcer of stomach (540)	875	231	434	147	18	4·1	7·7	2·4
Ulcer of duodenum (541)	853	128	545	114	18	2·3	9·7	1·8
Remainder of 530–587	1,459	1,535	1,364	1,243	30	27	24	20
All diseases of the digestive system (530–587)	3,187	1,894	2,343	1,504	66	34	42	24
Diseases of the genito-urinary system (590–637)								
Nephritis and nephrosis (590–594)	1,035	949	678	502	21	17	12	8·1
Remainder of 590–637	705	412	519	482	15	7·4	9·2	7·8
All diseases of the genito-urinary system (590–637)	1,740	1,361	1,197	984	36	24	21	16
All other diseases (remainder 001–795)								
All other diseases (rem. 001–795)	1,854	2,644	1,376	1,831	38	47	24	30
All accidents, poisonings and violence (E800–E999)								
Motor vehicle traffic accidents (E810–E825)	583	229	1,058	489	12	4·1	19	7·9
Accidental falls (E900–E904)	285	156	341	179	5·9	2·8	6·1	2·9
Accidental drowning and submersion (E929)	132	65	161	66	2·7	1·2	2·9	1·1
Suicide and self-inflicted injury (E970–E979)	1,285	776	1,390	1,001	26	14	25	16
Remainder of E800–E999	994	275	943	426	20	4·9	17	6·9
All accidents, poisonings and violence (E800–E999)	3,279	1,501	3,893	2,161	67	27	69	35
ALL CAUSES	69,209	48,048	75,259	44,651	1,424	858	1,337	723

criteria, rather than a real decrease in the incidence of the disease, appears responsible since the shift to coronary heart disease is characteristic of both sexes at this age-group and does not result from coding techniques. Consequently it remains difficult to say how much of the increase in coronary heart disease is real and how much is an artefact of diagnostic fashion.

Violence accounted for no more than 5 per cent of deaths at these ages and about a third of these violent deaths are due to suicide and no more than a quarter to motor vehicle traffic accidents.

Retirement age 65–74

In modern society 65 is usually accepted as the chronological age for retirement, irrespective of biological vigour. Age 65 therefore appears to be the most suitable at which to make an arbitrary division for statistical analysis.

In the first ten years of retirement, neoplasms account for 22 per cent of deaths, proportionately rather less than in middle age, but vascular diseases account for about half of all deaths.

Infectious diseases account for 1,435 deaths of which 931 were attributed to *tuberculosis.*

Neoplastic diseases caused 29,667 deaths and of these the site of the disease was as follows: stomach 4,582, large bowel 4,481, lung and bronchus 7,047, breast 2,211 and prostate 1,288.

It is in this age range that the deaths from lung cancer have shown the most marked increase over the decade; for males the death rate per 100,000 has gone up from 203 in 1950 to 432 in 1960, and the female rate from 34 to 46.

Thus the male deaths from cancer of the lung at these ages have doubled in a decade, resulting in an extra 3,303 deaths in this one age-group, whereas the saving of the tuberculosis deaths at this age was only of the order of 600 lives.

Vascular diseases are the most important cause of death at ages over 65.

Vascular diseases—death rates at ages 65–74 per 100,000 population

Cause of death	Males		Females	
	1950	1960	1950	1960
Vascular lesions of central nervous system ..	702	671	642	559
Coronary heart disease	872	1,292	412	569
Myocardial degeneration	641	249	507	186
Other vascular disease	590	525	452	400
All vascular diseases ..	2,805	2,738	2,013	1,714

Here again there is a marked shift from myocardial degeneration to coronary heart disease which is apparent in both sexes and which appears to be semantic in origin. Changes in coding techniques can only account for an alteration of approximately 2 per cent. At these ages the total death rate from vascular diseases has declined in both sexes. So it seems not unreasonable to conclude that at these ages there has been no true increase in coronary heart disease but that an artefact of change in medical diagnosis has brought about a statistical change.

At these ages violence accounts for 2 per cent of all deaths and of these, falls by women is an important item.

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Table XLII—*continued*

Cause and ICD No.	Number of deaths				Death rate per 100,000			
	1950		1960		1950		1960	
	Males	Females	Males	Females	Males	Females	Males	Females
Infective and parasitic diseases (001–138)								
Tuberculosis, all forms (001–019)	1,297	446	734	197	94	24	52	9·5
Remainder of 001–138	489	281	309	195	35	15	22	9·4
All infective and parasitic diseases (001–138)	1,786	727	1,043	392	129	39	74	19
Neoplasms (140–239)								
Stomach (151)	2,878	2,302	2,607	1,975	209	125	185	95
Large intestine (153)	1,573	1,799	1,103	1,583	114	98	78	76
Rectum (154)	1,403	827	1,014	781	102	45	72	38
Breast (170)	20	1,936	23	2,188	1·4	105	1·6	105
Cervix uteri (171)	—	617	—	581	—	34	—	28
Ovary, Fallopian tube and broad ligament (175)	—	602	—	709	—	33	—	34
Prostate (177)	1,258	—	1,288	—	91	—	91	—
Lung and bronchus (162, 163)	2,795	627	6,098	949	203	34	432	46
Remainder of 140–239	4,475	3,810	4,468	4,300	324	207	316	207
All neoplasms (140–239)	14,402	12,520	16,601	13,066	1,044	680	1,175	628
Diseases of the nervous system and sense organs (330–398)								
Vascular lesions affecting central nervous system (330–334)	9,694	11,813	9,484	11,633	702	642	671	559
Remainder of 330–398	698	795	581	726	51	43	41	35
All diseases of the nervous system and sense organs (330–398)	10,392	12,608	10,065	12,359	753	685	712	594
Diseases of the circulatory system (400–468)								
Chronic rheumatic heart disease (410–416)	1,027	1,608	517	1,084	74	87	37	52
Heart disease specified as involving coronary arteries, (420·1)	12,030	7,579	18,263	11,851	872	412	1,292	569
Arteriosclerotic heart disease (422·1) ..	3,485	3,328	1,837	1,843	253	181	130	89
Degenerative heart disease (422·2) ..	5,301	5,877	1,674	1,988	384	319	118	95
Congestive heart failure (434·1)	250	225	744	797	18	12	53	38
Hypertensive heart disease (440–443) ..	2,822	2,834	1,579	1,939	204	154	112	93
Other hypertensive heart disease (444–447)	587	592	817	823	43	32	58	40
General arteriosclerosis (450)	1,604	1,214	899	909	116	66	64	44
Remainder of 400–468	1,907	1,987	2,876	2,811	138	108	204	135
All diseases of the circulatory system (400–468)	29,013	25,244	29,206	24,045	2,102	1,371	2,067	1,155
Diseases of the respiratory system (470–527)								
Lobar pneumonia (490)	634	432	453	335	46	23	32	16
Bronchopneumonia (491)	1,348	1,186	2,068	1,808	98	64	146	87
Bronchitis (500–502)	5,928	2,912	6,587	1,908	430	158	466	92
Remainder of 470–527	1,487	895	1,416	567	108	49	100	27
All diseases of the respiratory system (470–527)	9,397	5,425	10,524	4,618	681	295	745	222
Diseases of the digestive system (530–587)								
Ulcer of stomach (540)	629	272	476	252	46	1	34	12
Ulcer of duodenum (541)	511	111	533	151	37	6·0	38	7·3
Remainder of 530–587	1,255	1,498	1,234	1,553	91	81	87	75
All diseases of the digestive system (530–587)	2,395	1,881	2,243	1,956	174	102	159	94
Diseases of the genito-urinary system (590–637)								
Nephritis and nephrosis (590–594) ..	816	900	401	395	59	49	28	19
Remainder of 590–637	1,934	355	1,225	530	140	19	87	25
All diseases of the genito-urinary system (590–637)	2,750	1,255	1,626	925	199	68	115	44
All other diseases (remainder 001–795)								
All other diseases (rem. 001–795)	1,912	3,102	1,312	2,370	139	168	93	114
All accidents, poisonings and violence (E800–E999)								
Motor vehicle traffic accidents (E810–E825)	323	155	424	361	23	8·4	30	17
Accidental falls (E900–E904)	252	423	293	532	18	23	21	26
Accidental drowning and submersion (E929)	99	29	61	33	7·2	1·6	4·3	1·6
Suicide and self-inflicted injury (E970–E979)	574	281	465	387	42	15	33	19
Remainder of E800–E999	297	228	264	303	22	12	19	15
All accidents, poisonings and violence (E800–E999)	1,545	1,116	1,507	1,616	112	61	107	78
ALL CAUSES	73,592	63,878	74,127	61,347	5,333	3,470	5,246	2,947

Table XLII—*continued*

Cause and ICD No.	Number of deaths				Death rate per 100,000			
	1950		1960		1950		1960	
	Males	Females	Males	Females	Males	Females	Males	Females
Infective and parasitic diseases (001–138)								
Tuberculosis, all forms (001–019)	270	173	313	148	44	18	45	12
Remainder of 001–138	233	219	202	213	38	23	29	17
All infective and parasitic diseases (001–138)	503	392	515	361	82	41	75	28
Neoplasms (140–239)								
Stomach (151)	1,764	2,254	1,966	2,576	289	236	285	202
Large intestine (153)	1,431	2,267	1,253	2,273	235	237	182	179
Rectum (154)	1,077	855	1,039	954	177	89	151	75
Breast (170)	19	1,603	20	2,053	3·1	168	2·9	161
Cervix uteri (171)	—	361	—	456	—	38	—	36
Ovary, Fallopian tube and broad ligament (175)	—	268	—	453	' —	28	—	36
Prostate (177)	1,381	—	1,920	—	226	—	278	—
Lung and bronchus (162, 163)	733	320	2,299	634	120	33	333	50
Remainder of 140–239	3,339	3,041	3,760	4,460	547	318	545	350
All neoplasms (140–239)	9,744	10,969	12,257	13,859	1,597	1,146	1,776	1,089
Diseases of the nervous system and sense organs (330–398)								
Vascular lesions affecting central nervous system (330–334)	11,767	18,748	14,804	27,072	1,929	1,959	2,146	2,127
Remainder of 330–398	585	735	525	849	96	77	76	67
All diseases of the nervous system and sense organs (330–398)	12,352	19,483	15,329	27,921	2,025	2,036	2,222	2,193
Diseases of the circulatory system (400–468)								
Chronic rheumatic heart disease (410–416)	767	1,535	342	964	126	160	50	76
Heart disease specified as involving coronary arteries (420·1)	8,372	7,884	15,286	16,920	1,372	824	2,215	1,329
Arteriosclerotic heart disease (422·1) ..	7,893	11,063	6,181	11,166	1,294	1,156	896	877
Degenerative heart disease (422·2) ..	12,925	21,227	7,168	13,282	2,119	2,218	1,039	1,043
Congestive heart disease (434·1) ..	304	424	1,403	2,161	50	44	203	170
Hypertensive heart disease (440–443) ..	2,676	3,745	2,034	3,907	439	391	295	307
Other hypertensive heart disease (444–447)	801	946	1,070	1,892	131	99	155	149
General arteriosclerosis (450)	3,591	4,408	3,510	5,313	589	461	509	417
Remainder of 400–468	1,598	2,291	3,392	5,493	262	239	492	432
All diseases of the circulatory system (400–468)	38,927	53,523	40,386	61,098	6,381	5,593	5,853	4,800
Diseases of the respiratory system (470–527)								
Lobar pneumonia (490)	480	549	554	716	79	57	80	56
Bronchopneumonia (491)	2,068	2,864	4,887	6,823	339	299	708	536
Bronchitis (500–502)	5,719	5,931	6,321	4,172	938	620	916	328
Remainder of 470–527	1,323	1,720	1,361	1,402	217	180	197	110
All diseases of the respiratory system (470–527)	9,590	11,064	13,123	13,113	1,572	1,156	1,902	1,030
Diseases of the digestive system (530–587)								
Ulcer of stomach (540)	361	297	518	562	59	31	75	44
Ulcer of duodenum (541)	252	106	510	272	41	11	74	21
Remainder of 530–587	1,156	1,661	1,371	2,442	190	174	199	192
All diseases of the digestive system (530–587)	1,769	2,064	2,399	3,276	290	216	348	257
Diseases of the genito-urinary system (590–637)								
Nephritis and nephrosis (590–594) ..	871	952	478	555	143	99	69	44
Remainder of 590–637	3,427	388	2,940	849	562	41	426	67
All diseases of the genito-urinary system (590–637)	4,298	1,340	3,418	1,404	705	140	495	110
Symptoms, senility and ill-defined conditions (780–795)								
Senility without mention of psychosis (794)	3,337	5,683	2,174	4,559	547	594	315	358
Ill-defined and unknown causes of mortality (795)	4	2	1	4	0·7	0·2	0·1	0·3
Remainder of 780–795	37	38	62	76	6·1	4·0	9·0	6·0
Symptoms, senility and ill-defined conditions (780–795)	3,378	5,723	2,237	4,639	554	598	324	364
All other diseases (remainder 001–795)								
All other diseases (rem. 001–795)	1,366	2,721	1,350	3,385	224	284	196	266
All accidents, poisonings and violence (E800–E999)								
Motor vehicle traffic accidents (E810–E825)	266	191	465	389	44	20	67	31
Accidental falls (E900–E904)	695	1,908	978	2,788	114	199	142	219
Accidental drowning and submersion (E929)	72	19	49	20	12	2·0	7·1	1·6
Suicide and self-inflicted injury (E970–E979)	257	110	265	151	42	11	38	12
Remainder of E800–E999	205	354	352	577	34	37	51	45
All accidents, poisonings and violence (E800–E999)	1,495	2,582	2,109	3,925	245	270	306	308
ALL CAUSES	83,422	109,861	93,123	132,981	13,676	11,480	13,496	10,446

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Old age—75 and over

It is difficult to determine when senescence begins, even more so than to establish puberty or menopause. Yet there comes an age when minor illness can cause major disability and death. This may be taken as occurring before age 80 so that 75 is a reasonable age of demarcation. Nevertheless, in 1960 there were 226,104 deaths over the age of 75 which accounted for 43 per cent of all deaths and consequently the deaths at these advanced ages greatly influenced the general picture of mortality in this country.

Infectious diseases accounted for 876 deaths of which 461 were due to tuberculosis.

Neoplasms account for no more than 12 per cent of the deaths at these older ages, not because there was any decline in the neoplastic death rate but because other rates increased more sharply. Numbers of deaths in the principal sites of the neoplasms were stomach 4,542, large bowel 5,519, lung and bronchus 2,933, breast 2,073, and prostate 1,920. The increase in the rate for deaths from lung cancer more than accounted for the total increase in the death rate for all neoplasms at these ages and in fact the mortality from most of the other sites of cancer declined slightly. The rate for cancer of the lung, however, increased for males from 120 to 333 per 100,000 and for females from 33 to 50 per 100,000 between 1950 and 1960. The male rate almost trebled and there was almost no compensatory saving of lives from tuberculosis.

Vascular diseases accounted for over 60 per cent of all the deaths at these ages.

Vascular diseases—death rates at ages 75 and over per 100,000 population

Cause of death	Males		Females	
	1950	1960	1950	1960
Vascular lesions of central nervous system ..	1,929	2,146	1,959	2,127
Coronary heart disease	1,372	2,215	824	1,329
Myocardial degeneration	3,420	1,935	3,385	1,923
Other vascular diseases	1,589	1,702	1,382	1,547
All vascular diseases	8,310	7,999	7,552	6,926

Once again there is the marked shift in deaths to coronary heart disease from myocardial degeneration. If these two causes are taken together, there has been a decrease in the death rate from cardiac disease at these older ages for both males and females.

There has been some increase in vascular disease of the central nervous system.

Accidents are an important cause of death, especially *falls* which account for 3,766 at these ages, whereas *suicide* accounts for 416 and *motor vehicle accidents* 854.

Individual causes of death

Infectious diseases

The crude death rate from all infectious diseases has continued to fall and even in one year between 1959 and 1960 there was a 9 per cent decline from 13·5 per 100,000 persons living to 12·3 per 100,000. This rate has been falling

for many years. In 1940 the death rate per 100,000 was 100·9, by 1950 it had more than halved to 47·0, but by 1960 it was further reduced by another three quarters to 12·3. It is apparent that even if this rate continues to fall at a rate of ten per cent per annum its relative effect on total mortality has now become small.

Tuberculosis has always been the most prominent of the diseases allocated to the statistical group of infectious diseases as rheumatic fever, pneumonia, gastro-enteritis and many other diseases of bacterial and viral origin are allocated by the International Statistical Classification to the organ system which they infect and not to the infectious diseases section.

The tuberculosis death rate continues to fall, the death rate from tuberculosis in 1960 being only 7·5 per 100,000 persons which may be compared with a rate of 8·5 in the previous year or 36·4 in 1950. It is interesting to note, however, that at certain ages and with certain manifestations of the diseases the fall has been even greater.

Death rates per 100,000 population

Age	Respiratory tuberculosis				Tuberculous meningitis			
	Males		Females		Males		Females	
	1950	1960	1950	1960	1950	1960	1950	1960
0–1* ..	7·8	—	5·6	0·8	6·1	0·5	8·9	0·3
1–4	2·9	0·1	2·2	0·2	11·3	0·3	12·3	0·3
5–14.. ..	0·8	—	1·1	0·1	3·2	0·1	3·1	0·1
15–24.. ..	15·7	0·2	31·9	0·3	2·0	0·1	3·1	0·2
25–44.. ..	41·2	3·8	35·6	3·3	⎫			
45–64.. ..	86·5	19·7	22·1	4·3	⎬ 0·6	0·1	0·4	0·1
65–74.. ..	89·1	49·2	21·2	7·7	⎭			
75 and over ..	41·1	43·6	14·4	9·1				

* Per 100,000 live births.

Tuberculous meningitis has almost been eliminated as a cause of death although with a large reservoir of infection still existing in the adult population it remains a serious danger to be carefully watched.

Respiratory tuberculosis has been greatly reduced at the younger ages, especially among women, but there still remain many individuals infected in the inter-war period who will develop complications and may die of the disease during the next twenty years. Nevertheless, with the suppression of the disease among the younger ages and its successful treatment in the early stages, it is possible to foresee a time when the disease will have been eliminated in this country as effectively as smallpox or cholera, but the need for vigilance as with all other infectious diseases will remain.

Syphilis. The decline in deaths attributed to syphilis continues but at a much slower rate than with tuberculosis. This is mainly because the clinical progress of this disease is even longer and slower than with tuberculosis and the majority of the deaths are due to tertiary syphilis of the cardiovascular system or to chronic effects on the central nervous system. It is not unreasonable to expect the decline to continue because in 1950, when the death rate from

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syphilis was 3·4 per 100,000, the proportion of persons dying over the age of 65 was only 46 per cent whereas in 1960, when the rate was 2·1 per 100,000, the proportion over the age of 65 was 62 per cent.

To some extent this age increase is an artefact of the Seventh Revision of the International Statistical Classification as a result of which aneurysms of the abdominal aorta of unspecified origin are allocated to the class of aortic aneurysm rather than attributed as formerly to a syphilitic origin. The definition of neuro-syphilis, however, remains unchanged and this change in the older ages is also present in these diseases.

The *acute bacillary infections of the gastro-intestinal tract* have remained fairly constant at about 80 deaths a year for the last seven years; about half of these are due to *salmonella infections* and one quarter due to *bacillary dysentery*.

1960 was remarkable in that it was the first year since death records were initiated in which no death was recorded from *scarlet fever*, although 8 deaths were reported in which scarlet fever occurring more than one year before death was a contributory factor.

Diphtheria unfortunately recurred after a nil return the previous year and there were 5 deaths.

Meningococcal infections continued to be a serious cause of death among children although the rate continued to decline. There were 95 deaths assigned to this cause.

Poliomyelitis has declined as a cause of death but as it is markedly epidemic in behaviour it is impossible to attach great significance to the results of a single year. Since 1957 the deaths attributed to poliomyelitis have been declining as shown below; this is co-incident with the introduction of Salk vaccine.

Deaths attributed to poliomyelitis. All ages, persons

Year			Acute poliomyelitis	Late effects of poliomyelitis
1956	..	..	..	114	23
1957	..	..	..	226	29
1958	..	..	..	129	25
1959	..	..	..	66	21
1960	..	..	..	23	23

Among other viral infections there are two prominent causes of death: *acute infectious encephalitis* and *infectious hepatitis*.

Acute infectious encephalitis has tended to remain steady and for a decade the number of deaths assigned to this cause have fluctuated randomly about a mean number of 108 deaths per annum, but those deaths attributed to the late effects of acute infectious encephalitis have declined.

Infectious hepatitis has also remained fairly constant at a level of about 275 deaths in the year, and although there appears to have been an outbreak in 1960 which raised the level above 300 deaths for the first time, this is still within the limits of annual random fluctuation and may not indicate a rising trend in the disease.

If tuberculosis and syphilis are regarded as chronic infectious diseases and taken out of account, deaths assigned to all other acute infectious diseases amounted to no more than 1,251 in 1960. Of these deaths 308 were due to infectious hepatitis and 238 to infectious encephalitis.

Neoplasms

In the year 1960 malignant neoplasms, including the reticuloses, accounted for 98,788 deaths, giving a death rate of 216 per 100,000 persons living. This rate has increased steadily by about 1 per cent per annum for the last ten years, as is shown in the figures in the table below, and in Table 8 of Part I and Table LXXXI.

But this rate has a marked sex difference; the female rate is 194 and the male rate 239, a male/female sex ratio of 1·23. Also the female crude rate has been rising only slightly whereas the male crude rate has risen by 16 per cent in the decade. When the rates are standardised to allow for the increasing age of the population, as has been done in Table LXXXI, the Standardised Mortality Ratio for deaths due to cancer among females has actually fallen from an average of 100 in the three years 1950–52 to 97 in 1960, but the male rate has increased from 100 in 1950–52 to 108 in 1960.

Standardised Mortality Ratios (1950–52 = 100), 1960

Site of cancer	Males	Females
Sites where the ratio has increased		
Brain—malignant	136	146
Kidney	106	109
Bladder	109	106
Prostate	110	—
Ovary	—	107
Lung and bronchus	153	132
Hodgkin's disease	106	125
Leukaemia	134	124
Pancreas	115	111
Site where the ratio has remained constant		
Breast	—	100
Sites where the ratio has decreased		
Lip, tongue and buccal cavity	63	89
Pharynx	73	96
Oesophagus	79	102
Stomach	88	81
Intestine (large)	78	82
Rectum	77	86
Cervix uteri	—	90
Corpus uteri	—	92
Brain—non-malignant	57	71
Bone	72	71
All malignant sites excluding lung and bronchus	93	95
Total	108	97

This small increase in the total male rate has been very variable in its distribution. All cancer of the gastro-intestinal tract declined except the primary carcinomas of the pancreas and it seems not unreasonable that this one increase may be partially attributable to increased accuracy of diagnosis.

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If the rates of 1950–52 had prevailed in 1960 then approximately 6,500 more deaths from cancer of the gastro-intestinal tract would have occurred.

In the case of female genital organs there was a reduction in cancers of the cervix but an increase in those of the ovary.

An increase in malignant neoplasms of the brain was to some extent countered by a decrease in the unspecified neoplasms of the brain (ICD No. 237) and hence may be attributable to improved diagnostic facilities. The Standardised Mortality Ratio for all neoplasms of the brain has shown a small increase in the decade and is 104 for males and 110 for females in 1960.

There were, however, increases in cancer of the urinary tract, leukaemias and Hodgkin's disease, and in cancer of the lung and bronchus. The Standardised Mortality Ratios show that, if cancer of the lung and bronchus is excluded, there was an overall reduction in cancer mortality during the decade. This applied to men as well as to women.

At age 54 and under there has been very slight change in the total cancer death rate (excluding lung cancer) during the decade but for ages 55 and over there has been an improvement in these death rates.

Such a decline in death rates, however, may be attributable either to a decline in incidence of the disease or a decline in the case fatality rate or to a combination of both. In the present state of knowledge of the incidence of cancer in this country it is impossible to state which of these possibilities is of the greater importance.

Leukaemia

Table 10 of Part I indicates that at the younger ages under 25 there has not been an increase in the mortality rate but that the increase which has affected the Standardised Mortality Ratio for leukaemia is mainly accounted for by an increase in deaths over the age of 65. In view of changes in the definitions of the sub-divisions of leukaemia in the Seventh Revision of the International Statistical Classification it is not possible to distinguish the various types of leukaemia involved but between 1958 and 1960 there has been a considerable increase in the rate of acute leukaemia. The problem of leukaemia was discussed more thoroughly in the 1956 Commentary and in a paper based upon these figures published by the Medical Research Council.*

Allergic and endocrine diseases

During the decade steroids became more widely used in medical practice and this may be the reason for the reduction of the death rate due to *asthma* by a half although it has also been suggested that improved diagnosis has accounted for some of this reduction.

Thyrotoxicosis also declined in the early years of the decade but has remained constant for the last 5 years.

Diabetes has shown a decline until the last year when there was a sudden increase in deaths attributable to this disease of the order of 10 per cent, an appreciable rise for which there is no apparent simple explanation. In 1960 there were 366 more deaths from this cause than in 1959. Of this increase 292 deaths related to persons in the over 65 age-groups. Yet the rise at the younger

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* Court Brown, W.M., Doll, R. and Bradford Hill, A. (1960). *Brit. med. J.*, vol. II. pp. 1539–1545.

ages was greater as a percentage increase although the absolute figures were small. Under the age of 45 deaths attributed to diabetes rose from 154 in 1959 to 186 in 1960.

Vascular diseases

Vascular lesions of the central nervous system. A slight rise in the death rates over a period of years from these diseases is entirely attributable to the increasing age of the population and the Standardised Mortality Ratio for this group as a whole has remained constant. These are diseases where it is sometimes considered that the female rate is higher than the male and this is apparently supported by the crude rates for males of 140 per 100,000 and for females, 191. At almost every age, however, the male rate is slightly higher than the female rate although the difference is small and the large differences in crude rates are due to the large female population at higher ages.

Vascular lesions of the central nervous system—
death rates per 100,000 population, 1960

Age	Male	Female
1–14	0·7	0·5
15–24	1·3	1·3
25–44	7·9	8·3
45–64	109	96
65–74	671	559
75 and over	2,146	2,127
All ages	140	191

There is a distinction to be noted, however, between subarachnoid haemorrhages and cerebral haemorrhage or thrombosis. Subarachnoid haemorrhages account for only 3,447 deaths or 5 per cent of the group of vascular lesions of the central nervous system, but this is very unevenly divided and at ages under 45 subarachnoid haemorrhages account for more than half of all these deaths.

Vascular lesions of the central nervous system, 1960
Persons

Age	All vascular lesions deaths	Subarachnoid haemorrhages deaths	Subarachnoid haemorrhages as a percentage of all vascular lesions	Death rate per 100,000 population for subarachnoid haemorrhages
0–24	162	109	67	0·7
25–44	976	508	52	4·2
45–64	12,091	1,657	14	14
65–74	21,117	703	3	20
75 and over	41,876	470	1	24
All ages	76,222	3,447	4·5	7·5

Thus subarachnoid haemorrhage remains a risk throughout life from the youngest ages and does not increase so steeply with age, whereas cerebral haemorrhage and thrombosis is almost entirely a disease of old age.

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Cardiovascular diseases

In the year 1960 there were 198,563 deaths attributed to diseases of the circulatory system (ICD Nos. 400–468), which represented an increase of 6,731 deaths over the previous year when there were 191,832. It is important, however, to remember that, allowing for age and sex, there has been a steady decline in deaths for females and no increase in the male death rate during the past decade and that the 1960 experience did not raise the Standardised Mortality Ratios to the level of 1958.

Standardised Mortality Ratios (1950–52 = 100)

Year	All cardiovascular diseases ICD Nos. 400–468		Arteriosclerotic heart disease ICD No. 420		Other myocardial degenerations ICD No. 422	
	M	F	M	F	M	F
1950..	98	102	94	96	102	104
1951..	104	105	101	100	108	109
1952..	97	93	105	103	90	88
1953..	95	92	104	103	84	85
1954..	97	90	112	108	80	79
1955..	98	92	116	115	79	78
1956..	99	91	121	119	75	74
1957..	95	86	122	119	65	64
1958..	98	89	129	129	65	66
1959..	94	85	128	130	57	60
1960..	96	86	137	138	53	57

But this decline in the total rate conceals a large difference in the types of vascular diseases that are being diagnosed. From the above table it is at once apparent that in the course of a decade there has been a considerable increase in deaths attributable to arteriosclerotic heart disease and an equally large (or even larger) drop in deaths attributable to other myocardial degeneration. This has not been caused by differences in statistical coding as there have been no important changes in this section of the International Classification of Diseases. It may be due either to an important change in the diseases causing death or due to a gradual semantic change over the years by which a clinical entity of essentially unknown aetiology may be given a different name. " Myocardial insufficiency " or " myocardial degeneration " were popular diagnoses for those sudden deaths attributable to a disease of the heart but whose precise aetiology is unknown. These would be coded to ICD No. 422. A decade later the term " coronary heart disease " or " coronary infarct " is a more popular expression, which is correctly coded to ICD No. 420, but there is little evidence that there has been a large increase in coronary heart disease as such.

Among functional heart diseases there has also been a movement of attribution from hypertensive heart disease, ICD Nos. 440-443, to other heart diseases, ICD Nos. 430–434. Once again the crux of the matter is whether the certifying medical practitioner mentions the presence of hypertension. Hypertensive heart disease is coded to ICD No. 440, but congestive heart failure to ICD No. 434.1 and cor pulmonale to ICD No. 434·5. There was an alteration in

coding in 1952 which caused a considerable number of deaths to be assigned to hypertension without heart disease instead of to hypertensive heart disease and consequently the following table only goes back to 1952:

Standardised Mortality Ratio (1950–52 = 100)

Year	Hypertensive heart disease ICD Nos. 440–443		Hypertension without heart disease ICD Nos. 444–447		Other diseases of heart ICD Nos. 430–434	
	M	F	M	F	M	F
1952..	74	75	147	147	106	103
1953..	75	76	149	147	115	109
1954..	79	79	143	148	128	110
1955..	80	85	140	147	131	117
1956..	79	83	131	136	133	124
1957..	74	79	121	125	145	131
1958..	69	78	121	122	143	144
1959..	61	73	112	111	137	141
1960..	61	70	105	104	144	145

Respiratory diseases

Respiratory diseases have a cyclical variation influenced partly by the weather and partly by the incidence of influenza epidemics. As already mentioned, 1960 was a fortunate year in that there was no epidemic influenza and a mild winter. Only in 1952 and 1954 has a lower death rate from respiratory diseases been recorded.

Respiratory diseases, however, remain an important cause of mortality in this country and even in this year accounted for 56,955 deaths.

These were distributed as follows:

	Male	Female
Upper respiratory tract infection	68	57
Influenza	553	545
Lobar pneumonia	1,635	1,357
Bronchopneumonia	9,374	10,440
Acute bronchitis	1,149	1,164
Chronic bronchitis	17,081	5,612
All other respiratory diseases ..	4,973	2,947
Total respiratory system diseases	34,833	22,122

The acute infections and bronchopneumonia continue to have an equal distribution between males and females. But chronic bronchitis continues to have the well-known male predominance which has shown no tendency to fall.

Gastro-intestinal diseases

Only 15,416 deaths occurred which were attributed to diseases of the gastro-intestinal tract. A third of these were due to ulceration.

Peptic ulcers. During an era when the facilities for medical treatment, blood transfusion and gastric surgery have increased enormously it is important to note that the death rate cannot be considered to remain a constant proportion

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of the incidence of the disease. It is surprising to observe that the female death rate for duodenal ulcers has increased and that for gastric ulcers the decline is slight. For males, on the other hand, the mortality rate has declined by one quarter for duodenal ulcers and by one half for gastric ulcers. There still remains a large male predominance in the absolute rates but the male/female ratio is falling rapidly as the female rate approaches the male rate.

A study of the age distribution of the deaths attributed to peptic ulceration in 1950 and in 1960 reveals an interesting alteration in distribution.

The death rate at ages under 65 has declined almost to a half of what it was a decade ago and at the same time the death rate at ages over 75 has increased by 50 per cent.

It seems highly improbable that deaths at the older ages have increased by this amount and it appears that what is in fact happening is an improvement in diagnosis. Since it is possible nowadays to save even the elderly who suffer a severe haematemesis and melaena, every endeavour is made to differentiate malignant from other non-malignant causes of gastro-intestinal bleeding. This shows that many of these cases are due to non-malignant ulcers.

Peptic ulcers—death rates per 100,000 population, 1950 and 1960

Age	Male		Ratio 1960/1950	Female		Ratio 1960/1950
	1950	1960		1950	1960	
25–44	5·8	2·3	0·40	1·0	0·6	0·60
45–64	35·6	17·4	0·49	6·4	4·2	0·66
65–74	82·6	71·4	0·86	20·8	19·4	0·93
75 and over ..	100·5	149·0	1·48	42·1	65·5	1·56

Genito-urinary diseases

There were 10,546 deaths attributable to diseases of the genito-urinary systems, distributed as follows:

	M	F
Nephritis and nephrosis	2,005	1,709
Infections of kidney	907	1,288
Hyperplasia of prostate	3,259	—
Diseases of breast and female genital organs ..	1	187
Other genito-urinary diseases	649	541
Total	6,821	3,725

Nephritis and nephrosis have declined rapidly during the last decade as improved antibiotics and steroids have been brought into use, but there was a very slight increase in the death rate during 1960 compared with 1959.

Infections of the kidneys continue to rise in importance and the death rate has doubled in the decade. This may be partly due to wider appreciation that nephritis is often caused by an antecedent pyelonephritis. The rise in the deaths attributable to this cause is about 1,000 deaths during the decade whereas the fall in the nephritis-nephrosis deaths is about 3,000.

Hyperplasia of the prostate remains an important cause of death among the men over 75, but here the rate is declining rapidly as it is realised that even at advanced ages surgical intervention can be very successful.

Maternal and associated deaths

Deaths of women in childbirth have been greatly reduced in recent years; there were 2,065 in 1940, 821 in 1950 and only 385 in 1960. Unfortunately there was a slight increase in deaths in 1960 from 372 in 1959 but this increase of 13 was well within the range of a chance distribution. It does nevertheless illustrate the need for continual vigilance if the excellent results of modern obstetrics are to be maintained.

It is important to observe that the risk associated with maternity increases steeply with age and that over the age of 35 the risk is not negligible. Yet in 1960, although more than 80 per cent of women delivered their first child in hospital, more than 40 per cent of the women of 35 and over with a parity greater than 4 were delivered at home.

| Age at maternity | Maternities (*in thousands*) | Deaths | | Death rate per 100,000 maternities | | |
		Due to maternity	Associated with maternity	Due to maternity	Associated with maternity	All cases
Under 25	294	62	9	21	3	24
25–34	396	152	44	38	11	49
35 and over ..	101	96	22	95	22	117
Total	792	310	75	39	9	49

The principal causes of death due to childbearing were toxaemia of pregnancy with 60 deaths, ectopic pregnancies 17, abortion 62, antepartum haemorrhage 24, postpartum haemorrhage and retained placenta 19. There were 7 cases of death due to sepsis of childbirth and puerperium.

It is necessary to recall that the medical definition of an abortion is completely different from the legal definition. To a doctor an abortion is any untimely delivery before the beginning of the 28th week of gestation, whereas to the lawyers and the public the term tends to mean any expulsion of the foetus at any time before term due to external interference. The great majority of abortions are due to natural causes.

There was only one important individual cause of death not classed as due to the pregnancy but certified as associated with childbearing. This was mitral disease from which there were 13 deaths all of women over the age of 25. The remaining 62 deaths associated with pregnancy were due to a great variety of causes.

Accidents and violent deaths

There were 23,122 deaths attributed to accidents or violence, about 4 per cent of all deaths in the year.

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These deaths have been steadily increasing over the decade both in absolute number and in terms of death rates in spite of the improvements in treatment of accidents by medical and surgical care.

There are various aspects of this problem; motor vehicle traffic accidents continue to account for about 28 per cent of these deaths (6,557 deaths) whereas accidental falls account for 24 per cent (5,465 deaths) and suicides account for at least 22 per cent (5,112 deaths).

The age and sex distribution of these three main groups of violent deaths is very different; the motor traffic accidents affect men predominantly, and mostly young men, the falls are mostly by elderly women and the suicides are largely by males and many in middle age.

Motor vehicle traffic accidents

Deaths from motor vehicle traffic accidents have risen from 4,134 a decade ago to 6,557 in 1960, and the S.M.R. has risen from 100 in 1950–52 to 140 for males and 165 for females in 1960.

In the last five years these deaths have increased but not as rapidly as the registration of vehicles.

Death rates per 100,000 population

Ages	Male		Female	
	1956	1960	1956	1960
1–4	10	8	6	5
5–14..	7	8	3	4
15–24..	29	44	4	7
25–44..	15	17	3	4
45–64..	15	19	5	8
65–74..	26	30	13	17
75 and over	59	67	23	31
All ages	17	21	6	8

Vehicles registered (*in thousands*)

	Motorcycles over 50 cc.	Total vehicles
1956	1,043	6,920
1960	1,407	9,380

The very high rate of mortality from motorcycle accidents is a matter for particular concern. Although motorcycles accounted for 15 per cent of registered vehicles in 1960, there were 1,680 deaths to riders or passengers of motorcycles or 26 per cent of all motor vehicle traffic accident deaths. It should, however, be noted that figures for the true exposure to risk of " passenger miles travelled " are not available.

Falls

The death rate from falls in 1960 was 8·6 per 100,000 population for males and 15·0 for females, a male/female ratio of 0·57 which has been fairly constant during the last decade.

The majority of the deaths are due to falls on the same level and to unspecified falls and many are due to fractured femurs in elderly women over the age of 75. Although these deaths are necessarily attributed to the fall and consequent fracture, in many cases they result from a bronchopneumonia which occurs when the women take to their beds.

Suicide

Suicide remains a serious cause of death with a male rate of $13 \cdot 9$ per 100,000 and a female rate of $8 \cdot 7$, giving a male/female ratio of $1 \cdot 60$ and this also is a ratio that has remained fairly constant. In the last decade the rate of suicide increased from 1950 until 1956 and 1957 since when there has been a slight improvement. At all ages the suicide rate is higher for males than for females, and in the case of males it increases with age so that at ages over 75 the death rate for men is 38 per 100,000 population, which is three times as high as the rate for women of those ages at 12 per 100,000 population.

Type of injury. Deaths from violent causes are tabulated not only by the external cause but also by the nature of the injury inflicted, which enables us to make a more meaningful analysis of the mode of death.

The types of injury are shown in Table 18B of Part I of the *Review* and are summarised below:

	Males	Females	Persons
Fracture of skull	3,317	1,136	4,453
Other head injury	1,016	486	1,502
Fractures of spine or trunk	888	555	1,443
Fractures of limbs	1,142	2,893	4,035
Internal injuries of chest, abdomen, and pelvis ..	1,158	316	1,474
Poisoning by carbon monoxide	2,028	1,692	3,720
Poisoning by other causes	639	832	1,471
Drowning	1,082	386	1,468
All other causes	2,233	1,323	3,556
Total violent deaths	13,503	9,619	23,122

Head injury. It is clear that the commonest mode of violent death is by injury to the head either by fracture of the skull or by internal injury to the brain which accounted for 5,955 deaths.

The majority of these head injuries were received in motor vehicle traffic accidents.

Deaths from fracture of skull and other head injuries by external cause

External cause	Males	Females	Persons
Road vehicle accident to pedestrian	888	664	1,552
Pedal cyclist	411	83	494
Motorcyclist	1,081	109	1,190
Motor vehicle	494	185	679
Falls	660	412	1,072
Other causes	799	169	968
All causes	4,333	1,622	5,955

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Fractures of limbs. Deaths due to fractures of limbs present an entirely different picture to deaths from head injury. Only 214 deaths were due to fractures of the upper limbs and 3,821 to fractures of the lower limbs, of which 3,353 were fractures of the femur. Three-quarters of all such deaths are of persons over the age of 75 and the real cause is due to being bed-fast as a result of the fracture.

Deaths from fractures of the limbs

Age	Males	Females	Persons
Under 75	381	525	906
Over 75	761	2,368	3,129
Total	1,142	2,893	4,035

Poisoning
There were 5,191 deaths attributed to poison and of these three-quarters were due to carbon monoxide and in almost all of these the source of the carbon monoxide was domestic gas.

Deaths due to poisoning

Agent	Males	Females	Persons
Carbon monoxide	2,028	1,692	3,720
Barbiturates	372	566	938
Salicylates	91	139	230
Other agents	176	127	303
Total	2,667	2,524	5,191

Suicide by domestic gases, which constituted the most common agent in suicides, accounted for 2,499 deaths. The number of such deaths has remained relatively constant in recent years. Deaths due to accidental poisoning by utility gas, however, have continued to increase. They have risen steadily from 741 in 1956 to 948 in 1960, a trend which gives cause for concern.

Drowning
The number of deaths which occur annually from drowning has been approximately 1,500 in recent years and the male/female ratio has remained fairly constant at about 2·5. In 1960 there were rather fewer deaths from drowning than in the three previous years.

Deaths by sex 1956 to 1960

Year	Males	Females	Persons
1956	1,025	411	1,436
1957	1,094	453	1,547
1958	1,079	442	1,521
1959	1,079	425	1,504
1960	1,082	386	1,468

The ages at which deaths occur is important as many of these are the deaths of children and young adults but it is not possible to analyse from the statistics how many of these accidents are due to falling into water, how many are bathing accidents and how many are the deaths of attempted rescuers.

Deaths by sex and age, 1960

Age	Males	Females
0– 1	7	2
1– 4	85	21
5–14	170	30
15–24	134	11
25–44	172	50
45–64	300	165
65–74	129	74
75 and over	85	33

The types of accidents which caused the death by drowning are shown below:

Cause of drowning	Males	Females
Submersion of occupants of small boat	86	2
Submersion due to injury in a water transport vessel	35	1
Accidental drowning	677	197
Suicidal drowning	256	182
Other causes	28	4
Total	1,082	386

Table XLIII. Crude annual death rates per 1,000 living, and Standardised Mortality Ratios, 1841 to 1960, England and Wales

Period			Crude death rate per 1,000 living		Standardised Mortality Ratio* (1950–52 = 100)	
			Males	Females	Males	Females
1841–1850	..	..	23·1	21·6	320	396
1851–1860	..	..	23·1	21·4	313	384
1861–1870	..	..	23·7	21·4	319	383
1871–1880	..	..	22·7	20·1	308	362
1881–1890	..	..	20·3	18·1	281	327
1891–1900	..	..	19·3	17·1	268	307
1901–1910	..	..	16·4	14·4	221	248
1911–1920	..	..	15·1	13·0	187	207
1921–1930	..	..	12·9	11·4	142	159
1931–1940	..	..	13·0	11·5	125	136
1941–1950	..	..	12·5	10·9	104	107
1941	..	.. ..	14·0	11·8	124	127
1942	..	.. ..	12·5	10·5	109	111
1943	..	.. ..	12·7	11·1	109	114
1944	..	.. ..	12·6	10·7	106	108
1945	..	.. ..	12·3	10·7	103	106
1946	..	.. ..	12·2	10·9	101	106
1947	..	.. ..	12·9	11·2	106	108
1948	..	.. ..	11·5	10·1	93	95
1949	..	.. ..	12·3	11·1	99	103
1950	..	.. ..	12·3	11·0	98	101
1951	..	.. ..	13·4	11·8	106	106
1952	..	.. ..	12·2	10·5	96	93
1953	..	.. ..	12·2	10·7	96	94
1954	..	.. ..	12·2	10·5	95	91
1955	..	.. ..	12·5	10·9	97	93
1956	..	.. ..	12·5	10·9	96	92
1957	..	.. ..	12·3	10·7	94	88
1958	..	.. ..	12·4	11·0	95	90
1959	..	.. ..	12·3	11·0	94	89
1960	..	.. ..	12·2	10·9	92	87

* Civilians only, 1914–1918 and 1939–1949.

Table XLIV.   Abridged life table, 1958–60, England and Wales

Males		Age x	Females	
l_x	$\overset{\circ}{e}_x$		l_x	$\overset{\circ}{e}_x$
10,000	68·1	0	10,000	73·9
9,752	68·8	1	9,806	74·3
9,737	67·9	2	9,793	73·4
9,728	67·0	3	9,785	72·5
9,720	66·0	4	9,780	71·5
9,714	65·1	5	9,775	70·6
9,691	60·2	10	9,759	65·7
9,671	55·4	15	9,746	60·8
9,629	50·6	20	9,728	55·9
9,574	45·9	25	9,704	51·0
9,524	41·1	30	9,674	46·1
9,466	36·3	35	9,630	41·3
9,377	31·6	40	9,564	36·6
9,235	27·1	45	9,458	32·0
8,999	22·7	50	9,295	27·5
8,585	18·7	55	9,050	23·2
7,879	15·2	60	8,684	19·1
6,859	12·1	65	8,113	15·2
5,522	9·4	70	7,237	11·8
3,932	7·1	75	5,937	8·8
2,331	5·3	80	4,192	6·4
990	4·2	85	2,308	4·6

This abridged life table is constructed from the estimated *home* population in 1958, 1959 and 1960, and the total deaths registered in those years.

The column headed l_x shows, for each sex, the numbers who would survive to exact age x out of 10,000 born who were subject throughout their lives to the recorded age death rates of the period.

Column $\overset{\circ}{e}_x$ is the " expectation of life ", that is, the average future lifetime which would be lived by persons aged exactly x, if likewise subject to those death rates.

Table XLV. Expectation of life at birth and at age 1 year, 1838 to 1960, England and Wales

From English Life Table	Year	Expectation of life at			
		Birth		Age 1 year	
		Males	Females	Males	Females
No. 1	1841	40	42	47	48
2	1838–44	40	42	47	47
3	1838–54	40	42	47	47
4	1871–80	41	45	48	50
5	1881–90	44	47	51	53
6	1891–1900	44	48	52	55
7	1901–10	49	52	56	58
8	1910–12	52	55	58	60
9	1920–22	56	60	60	63
10	1930–32	59	63	62	65
11	1950–52	66	72	68	72
From annual Abridged Life Tables	1943	62	67	64	69
	1944	62	68	64	70
	1945	63	69	65	71
	1946	65	69	67	71
	1947	64	69	67	71
	1948	66	71	68	72
	1949	66	71	68	72
	1950	67	71	68	72
	1951	66	71	67	72
	1952	67	72	68	73
	1953	67	72	68	73
	1954	68	73	69	74
	1955	68	73	68	74
	1956	68	73	69	74
	1957	68	74	69	74
	1958	68	74	69	74
	1959	68	74	69	74
	1960	68	74	69	75

Table XLVI. Annual death rates per 1,000 living, by quarters in each year 1931 to 1960, with ratios to each yearly rate taken as 100, England and Wales

		Death rate per 1,000 living				Ratio to yearly rate taken as 100			
		March	June	September	December	March	June	September	December
1931 ..	..	16·5	11·5	9·6	11·7	134	93	78	95
1932 ..	..	15·4	11·6	9·7	11·5	128	97	81	96
1933 ..	..	17·1	10·8	9·4	12·0	139	88	76	98
1934 ..	..	14·6	11·8	9·6	11·2	124	100	81	95
1935 ..	..	13·2	12·0	9·8	12·0	113	103	84	103
1936 ..	..	15·1	11·8	9·7	12·0	125	98	80	99
1937 ..	..	16·2	11·6	9·7	12·3	131	94	78	99
1938 ..	..	13·6	11·6	9·9	11·5	117	100	85	99
1939 ..	..	15·1	11·7	9·9	11·8	125	97	82	98
1940 ..	..	20·6	11·9	10·8	14·1	143	83	75	98
1941 ..	..	18·4	14·2	10·1	11·5	136	105	75	85
1942 ..	..	15·8	12·0	9·8	11·6	128	98	80	94
1943 ..	..	14·5	11·7	10·1	15·7	112	90	78	121
1944 ..	..	15·3	12·0	11·0	12·7	120	94	87	100
1945 ..	..	16·5	11·5	10·0	12·6	131	91	79	100
1946 ..	..	15·4	11·2	9·7	11·9	128	93	81	99
1947 ..	..	17·6	11·3	9·2	11·4	143	92	75	93
1948 ..	..	12·4	10·3	9·4	11·7	113	94	85	106
1949 ..	..	15·2	11·2	9·3	11·8	129	95	79	100
1950 ..	..	14·0	11·1	9·3	12·3	120	95	80	106
1951 ..	..	19·1	11·1	9·1	11·0	153	89	73	88
1952 ..	..	13·4	10·6	8·9	12·4	119	94	79	110
1953 ..	..	15·8	10·4	8·9	10·7	139	91	78	94
1954 ..	..	14·0	10·6	9·3	11·4	124	94	82	101
1955 ..	..	15·4	11·2	9·1	11·1	132	96	78	95
1956 ..	..	15·3	10·8	9·3	11·3	131	92	79	97
1957 ..	..	12·2	10·6	9·7	13·4	106	92	84	117
1958 ..	..	14·7	11·0	9·3	11·7	126	94	79	100
1959 ..	..	15·8	10·6	9·0	11·1	136	91	78	96
1960 ..	..	13·1	10·9	9·8	12·2	114	95	85	106

Table XLVII. Average annual death rates per 1,000 living, by sex and age, 1841 to 1960, England and Wales

	Males									Females								
	All ages	0–*	1–	5–	15–	25–	45–	65–	85 and over	All ages	0–*	1–	5–	15–	25–	45–	65–	85 and over
1841–1850	23·1	167		7·24	8·23	11·2	23·6	89·6	312·3	21·6	137		7·27	8·50	11·6	21·1	82·4	293·3
1851–1860	23·1	168		6·79	7·71	10·9	23·2	86·8	308·2	21·4	139		6·84	7·98	10·9	20·1	80·0	288·9
1861–1870	23·7	168		6·43	7·26	11·5	24·8	87·7	315·0	21·4	139		6·25	7·30	10·7	20·6	79·8	285·1
1871–1880	22·7	163		5·29	6·24	11·3	26·1	90·2	327·4	20·1	134		5·05	6·12	9·92	21·0	80·9	296·4
1881–1890	20·3	155		4·20	4·97	9·79	25·5	89·4	305·8	18·1	128		4·23	4·97	8·76	20·6	78·9	270·8
1891–1900	19·3	168		3·40	4·38	8·82	25·2	89·4	286·8	17·1	138		3·49	4·06	7·58	20·3	79·5	261·4
1901–1910	16·4	140		2·80	3·61	7·16	22·3	82·7	279·2	14·4	114		2·91	3·20	5·60	17·5	71·6	250·3
1911–1920	15·1	112		2·93	4·16	7·05	20·2	81·4	274·5	13·0	89		2·97	3·53	5·54	15·2	67·6	243·6
1921–1925	12·9	86	6·88	2·10	3·06	5·24	16·9	76·2	272·7	11·4	66	6·23	2·05	2·83	4·26	12·8	64·0	241·2
1926–1930	12·9	77	5·00	2·06	2·93	4·84	17·0	76·3	298·1	11·4	59	4·40	1·90	2·67	3·97	12·4	62·5	254·4
1931–1935	12·7	70		1·84	2·81	4·23	16·6	75·1	278·9	11·4	54		1·71	2·51	3·67	11·9	61·0	245·0
1936–1940	13·3	62		1·60	2·64	3·95	17·3	76·2	286·3	11·6	48		1·40	2·17	3·22	11·5	60·1	252·7
1941–1945	12·8	56	3·72	1·44	2·99	3·72	15·7	69·0	226·1	10·9	44	3·26	1·13	1·98	2·84	9·86	52·6	206·6
1946–1950	12·2	41	1·90	0·79	1·42	2·58	14·5	69·9	241·6	10·9	32	1·62	0·59	1·29	2·17	8·79	52·1	208·9
1951–1955	12·5	30	1·23	0·52	1·05	2·05	13·9	75·5	265·9	10·9	23	1·04	0·37	0·60	1·60	8·02	51·9	222·0
1956	12·5	27	0·98	0·43	0·93	1·85	13·5	75·8	256·2	10·9	20	0·83	0·30	0·45	1·40	7·55	51·0	222·7
1957	12·3	26	1·04	0·46	1·03	1·86	13·7	73·5	226·8	10·7	20	0·90	0·32	0·49	1·41	7·59	48·7	199·2
1958	12·4	25	0·99	0·44	0·95	1·81	13·5	75·1	242·0	11·0	20	0·77	0·27	0·45	1·32	7·45	49·9	215·6
1959	12·3	25	1·00	0·43	1·03	1·79	13·5	73·9	240·0	11·0	20	0·81	0·31	0·44	1·30	7·34	49·3	215·4
1960	12·2	25	0·95	0·45	1·03	1·79	13·4	72·4	232·1	10·9	19	0·78	0·30	0·40	1·25	7·23	48·1	210·4

* Per thousand live births; related live births from 1931 to 1956.

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Table XLVIII. Deaths, death rates per million living, and Standardised Mortality Ratios (1950–52 = 100), from selected causes, by sex, 1951 to 1960, England and Wales

		1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
all					All causes						
Deaths	M	281,724	257,760	259,490	259,797	266,976	267,904	266,407	270,639	269,878	269,172
	F	267,656	239,724	244,039	242,099	251,888	253,427	248,463	256,204	257,773	257,096
Rate	M	13,387	12,210	12,237	12,204	12,482	12,451	12,306	12,447	12,332	12,196
	F	11,754	10,493	10,655	10,532	10,927	10,947	10,682	10,965	10,969	10,855
S.M.R.	M	106	96	96	95	97	96	94	95	94	92
	F	106	93	94	91	93	92	88	90	89	87
					Tuberculosis, all forms (001–019)						
Deaths	M	8,826	7,114	5,964	5,392	4,533	3,804	3,414	3,207	2,810	2,502
	F	4,980	3,471	2,938	2,505	1,959	1,571	1,370	1,273	1,044	933
Rate	M	419	337	281	253	212	177	158	147	128	113
	F	219	152	128	109	85	68	59	54	44	39
S.M.R.	M	103	82	69	62	52	43	38	36	31	27
	F	103	72	61	52	41	33	28	26	21	19
					All malignant neoplasms (140–205)						
Deaths	M	44,632	45,429	45,935	47,313	48,160	48,935	50,056	50,735	51,783	52,779
	F	41,448	42,213	41,989	42,782	43,180	43,775	43,961	45,069	45,334	46,009
Rate	M	2,121	2,152	2,166	2,223	2,252	2,274	2,312	2,333	2,366	2,391
	F	1,820	1,848	1,833	1,861	1,873	1,891	1,890	1,929	1,929	1,943
S.M.R.	M	101	101	102	103	104	105	106	106	107	108
	F	99	99	98	98	98	98	97	96	97	97
					Malignant neoplasm of stomach (151)						
Deaths	M	8,128	8,039	8,016	7,818	7,942	7,712	7,951	7,934	7,930	7,846
	F	6,478	6,316	6,176	6,232	6,146	6,163	5,966	6,178	6,146	6,107
Rate	M	386	381	378	367	371	358	367	365	362	356
	F	284	276	270	271	267	266	257	264	262	258
S.M.R.	M	101	99	98	95	95	91	93	92	91	88
	F	101	97	93	92	90	89	84	85	83	81
					Malignant neoplasm of trachea, bronchus and lung (162, 163)						
Deaths	M	11,127	11,942	12,835	13,941	14,761	15,544	16,358	17,040	18,181	18,882
	F	2,072	2,228	2,239	2,323	2,438	2,553	2,670	2,780	2,882	3,118
Rate	M	529	566	605	655	690	722	756	784	831	856
	F	91	98	98	101	106	110	115	119	123	132
S.M.R.	M	101	107	114	122	128	133	138	142	149	153
	F	99	105	104	107	111	115	118	121	124	132
					Malignant neoplasm of breast (170)						
Deaths	M	63	59	81	80	77	69	70	73	62	63
	F	7,972	8,251	8,115	8,315	8,449	8,522	8,552	8,949	8,708	9,059
Rate	M	3	3	4	4	4	3	3	3	3	3
	F	350	361	354	362	367	368	368	383	371	382
S.M.R.	M	102	94	128	125	119	105	105	109	92	92
	F	99	101	99	100	100	100	99	101	97	100
					Malignant neoplasm of uterus (171–174)						
Deaths	F	4,043	4,008	3,926	3,827	3,844	3,921	3,912	4,115	4,003	4,088
Rate	F	178	175	171	166	167	169	168	176	170	173
S.M.R.	F	99	97	94	91	90	91	89	93	89	90
					Leukaemia and aleukaemia (204)						
Deaths	M	984	1,102	1,116	1,142	1,223	1,229	1,301	1,301	1,315	1,476
	F	943	941	1,005	1,018	1,001	1,086	1,093	1,085	1,219	1,218
Rate	M	47	52	53	54	57	57	60	60	60	67
	F	41	41	44	44	43	47	47	46	52	51
S.M.R.	M	96	107	108	110	117	116	122	121	121	134
	F	104	103	109	110	107	115	115	113	125	124

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Table XLVIII—*continued*

		1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Diabetes mellitus (260)											
Deaths	M	1,219	1,091	1,066	1,048	1,084	1,108	1,013	1,152	1,100	1,193
	F	2,484	2,247	2,128	1,980	2,207	2,134	2,124	2,163	2,093	2,366
Rate	M	58	52	50	49	51	51	47	53	50	54
	F	109	98	93	86	96	92	91	93	89	100
S.M.R.	M	104	92	89	87	89	90	81	92	87	93
	F	104	92	86	78	86	82	80	80	77	85
Vascular lesions affecting central nervous system (330–334)											
Deaths	M	29,003	29,158	28,762	30,516	31,098	31,034	30,537	31,298	30,897	31,006
	F	39,443	40,230	39,307	41,626	43,054	43,453	43,132	44,879	44,253	45,216
Rate	M	1,378	1,381	1,356	1,433	1,454	1,442	1,411	1,439	1,412	1,405
	F	1,732	1,761	1,716	1,811	1,868	1,877	1,854	1,921	1,883	1,909
S.M.R.	M	103	102	99	104	105	104	100	102	100	99
	F	101	101	97	100	101	100	97	99	96	96
Diseases of the circulatory system (400–468)											
Deaths	M	97,749	92,513	91,423	94,637	96,704	98,065	95,784	99,907	96,306	100,244
	F	98,922	90,151	90,477	91,331	95,222	95,470	92,566	97,738	95,526	98,319
Rate	M	4,645	4,382	4,311	4,446	4,521	4,558	4,425	4,595	4,401	4,542
	F	4,344	3,946	3,950	3,973	4,131	4,124	3,980	4,183	4,065	4,151
S.M.R.	M	104	97	95	97	98	99	95	98	94	96
	F	105	93	92	90	92	91	86	89	85	86
Arteriosclerotic heart disease (420)											
Deaths	M	37,654	39,568	39,449	42,919	44,857	47,476	48,266	52,085	52,193	56,514
	F	21,777	22,827	23,175	24,925	26,813	28,300	28,910	31,956	32,729	35,447
Rate	M	1,789	1,874	1,860	2,016	2,097	2,206	2,230	2,395	2,385	2,561
	F	956	999	1,012	1,084	1,163	1,222	1,243	1,368	1,393	1,497
S.M.R.	M	101	105	104	112	116	121	122	129	128	137
	F	100	103	103	108	115	119	119	129	130	138
Diseases of the respiratory system (470–527)											
Deaths	M	45,783	31,951	36,799	31,090	35,381	36,080	37,939	37,024	40,756	34,833
	F	35,824	21,038	26,364	20,056	23,345	24,428	24,066	23,784	27,796	22,122
Rate	M	2,176	1,514	1,735	1,460	1,654	1,677	1,753	1,703	1,862	1,578
	F	1,573	921	1,151	873	1,013	1,055	1,035	1,018	1,183	934
S.M.R.	M	126	87	100	83	94	95	98	96	104	88
	F	135	77	96	71	81	83	80	79	91	71
Influenza (480–483)											
Deaths	M	7,393	879	2,905	878	1,460	1,272	3,553	1,216	3,898	553
	F	8,416	871	3,560	933	1,523	1,354	3,163	1,185	3,964	545
Rate	M	351	42	137	41	68	59	164	56	178	25
	F	370	38	155	41	66	58	136	51	169	23
S.M.R.	M	220	26	85	25	42	36	99	34	107	15
	F	223	23	91	23	37	33	74	27	90	12
Pneumonia (490–493, 763)											
Deaths	M	12,189	10,335	11,273	9,750	11,101	11,671	12,074	12,311	13,648	12,269
	F	11,290	9,218	10,414	9,126	10,715	11,549	11,488	12,264	13,692	12,806
Rate	M	579	490	532	458	519	542	558	566	624	556
	F	496	404	455	397	465	499	494	525	583	541
S.M.R.	M	114	97	105	90	102	107	109	110	121	107
	F	115	93	104	90	104	110	107	112	123	113
Bronchitis (500–502)											
Deaths	M	22,910	17,781	19,567	17,163	19,318	19,890	18,956	20,326	20,193	18,997
	F	14,582	9,787	11,141	8,625	9,675	10,019	8,141	9,070	8,858	7,488
Rate	M	1,089	842	923	806	903	924	876	935	923	861
	F	640	428	486	375	420	433	350	388	377	316
S.M.R.	M	118	91	99	86	96	98	92	98	96	89
	F	124	81	91	68	76	77	61	68	65	54

Table XLVIII—*continued*

		1951	1952	1953	1954	1955	1956	1957	1958	1959	1960

Ulcer of stomach and duodenum (540, 541)

Deaths	M	4,276	4,059	3,795	4,011	3,975	3,778	3,568	3,425	3,090	3,165
	F	1,354	1,325	1,331	1,467	1,542	1,564	1,461	1,473	1,473	1,540
Rate	M	203	192	179	188	186	176	165	158	141	143
	F	59	58	58	64	67	68	63	63	63	65
S.M.R.	M	105	99	92	96	94	89	83	79	70	71
	F	104	100	99	107	111	111	101	101	99	102

Appendicitis (550–553)

Deaths	M	679	598	550	547	485	522	497	462	430	367
	F	493	447	356	422	360	331	302	328	271	271
Rate	M	32	28	26	26	23	24	23	21	20	17
	F	22	20	16	18	16	14	13	14	12	11
S.M.R.	M	101	88	81	80	70	75	71	65	60	51
	F	99	89	70	82	69	63	57	61	50	49

Nephritis and nephrosis (590–594)

Deaths	M	3,155	2,898	2,706	2,645	2,448	2,554	2,250	2,158	1,923	2,005
	F	3,193	2,795	2,549	2,453	2,294	2,125	1,945	1,920	1,762	1,709
Rate	M	150	137	128	124	114	119	104	99	88	91
	F	140	122	111	107	100	92	84	82	75	72
S.M.R.	M	101	92	86	83	76	79	69	66	58	60
	F	102	89	80	76	70	64	58	57	51	49

Accidents, poisonings and violence (E800–E999)

Deaths	M	12,447	11,992	12,333	12,630	12,932	12,992	12,858	13,343	13,456	13,503
	F	7,309	6,810	7,531	8,239	8,537	8,878	8,703	9,113	9,379	9,619
Rate	M	591	568	582	593	605	604	594	614	615	612
	F	321	298	329	358	370	383	374	390	399	406
S.M.R.	M	103	99	101	103	105	105	103	106	106	105
	F	104	96	104	112	115	118	113	117	119	120

Motor vehicle traffic accidents (E810–E825)

Deaths	M	3,293	3,013	3,225	3,289	3,552	3,655	3,608	3,966	4,345	4,676
	F	1,099	958	1,021	1,158	1,256	1,284	1,219	1,400	1,607	1,881
Rate	M	156	143	152	155	166	170	167	182	199	212
	F	48	42	45	50	54	55	52	60	68	79
S.M.R.	M	105	96	102	104	112	115	112	123	133	142
	F	107	92	97	109	118	119	111	127	144	166

Accidents in the home and residential institutions (E870·0 and ·7–E936·0 and ·7)

Deaths	M	2,002	1,955	2,157	2,452	2,424	2,516	2,419	2,559	2,519	2,478
	F	3,481	3,271	3,738	4,165	4,227	4,392	4,248	4,442	4,491	4,552
Rate	M	95	93	102	115	113	117	112	118	115	112
	F	153	143	163	181	183	190	183	190	191	192
S.M.R.	M	104	102	113	127	125	129	122	128	125	121
	F	104	96	108	118	118	120	113	116	115	114

Suicide and self-inflicted injury (E970–E979)

Deaths	M	2,831	2,788	3,020	3,178	3,060	3,198	3,170	3,175	3,116	3,058
	F	1,638	1,550	1,734	1,865	1,940	2,084	2,145	2,123	2,091	2,054
Rate	M	135	132	142	149	143	149	146	146	142	139
	F	72	68	76	81	84	90	92	91	89	87
S.M.R.	M	100	98	106	110	105	109	107	106	104	101
	F	103	97	108	115	119	126	129	127	124	121

Table XLIX. Death rates per 1,000 living, by sex and age, and Standardised Mortality Ratios (all ages) in standard regions and urban and rural aggregates within regional groups, 1960, England and Wales

	Males							Females						
	All ages	0–	5–	15–	45–	65 and over	S.M.R.	All ages	0–	5–	15–	45–	65 and over	S.M.R.
ENGLAND AND WALES	12·2	6·19	0·45	1·54	13·4	79·5	100	10·9	4·79	0·30	0·98	7·23	57·9	100
Urban and rural aggregates:														
Conurbations	12·1	6·41	0·43	1·55	14·2	81·5	103	10·6	5·02	0·30	0·99	7·27	57·9	100
Areas outside conurbations:														
Urban areas with populations of 100,000 and over	12·9	6·35	0·47	1·60	14·4	86·9	108	11·1	4·82	0·25	0·95	7·63	60·1	104
Urban areas with populations of 50,000 and under 100,000	12·5	6·04	0·44	1·55	13·5	81·9	102	11·4	4·65	0·29	1·01	7·05	58·5	100
Urban areas with populations under 50,000	12·7	6·27	0·46	1·52	13·1	78·8	99	11·3	4·71	0·29	0·99	7·27	58·2	100
Rural districts	11·3	5·65	0·48	1·48	11·4	72·5	90	10·5	4·51	0·34	0·93	6·91	55·8	96
NORTH OF ENGLAND	12·9	6·91	0·45	1·65	14·8	84·4	108	11·4	5·39	0·31	1·07	8·01	62·9	109
Regions:														
Northern	12·7	6·85	0·55	1·64	14·8	85·4	108	10·8	5·23	0·31	1·10	8·25	63·9	111
East and West Ridings	12·6	6·22	0·44	1·52	14·1	81·8	103	10·9	5·13	0·26	0·99	7·52	60·3	104
North Western	13·3	7·37	0·41	1·73	15·2	85·7	110	11·9	5·64	0·34	1·11	8·20	64·0	111
Conurbations:	13·1	7·24	0·43	1·68	15·6	86·9	112	11·4	5·55	0·32	1·09	8·06	63·0	110
Tyneside	13·6	6·74	0·50	1·57	15·9	90·4	114	10·5	4·97	0·25	1·12	7·96	63·6	110
West Yorkshire	13·6	6·81	0·46	1·55	15·2	85·9	109	11·8	5·57	0·29	1·06	7·71	61·2	106
South East Lancashire	13·3	7·52	0·43	1·75	15·7	85·9	112	12·0	5·51	0·34	1·09	8·28	64·9	113
Merseyside	12·3	7·56	0·36	1·78	15·9	88·1	114	10·6	5·90	0·36	1·13	8·20	61·5	109
Areas outside conurbations:														
Urban areas with populations of 100,000 and over	13·4	6·72	0·48	1·75	15·6	88·1	113	11·1	5·28	0·24	1·04	8·06	62·5	108
Urban areas with populations of 50,000 and under 100,000	13·3	6·65	0·46	1·75	15·0	85·5	109	11·7	5·46	0·28	1·05	7·74	64·6	111
Urban areas with populations under 50,000	13·0	6·87	0·51	1·60	13·8	81·8	103	11·6	5·30	0·31	1·05	8·18	63·4	110
Rural districts	11·6	6·12	0·41	1·48	12·5	77·4	96	10·7	5·02	0·34	1·06	7·64	61·2	106

	11·9	6·46	0·50	1·63	13·4	79·4	101	10·3	4·97	0·30	1·00	7·43	58·8	102
WALES AND MIDLANDS														
Regions:														
Wales	13·7	6·90	0·55	1·87	14·6	84·6	108	11·2	5·34	0·29	1·12	7·92	62·2	108
North Midland	11·5	6·19	0·48	1·54	12·2	76·7	95	10·2	4·76	0·30	0·89	7·18	57·3	99
Midland	11·2	6·42	0·47	1·57	13·6	78·3	100	9·87	4·94	0·32	1·02	7·35	57·9	101
Conurbation:														
West Midlands	11·2	6·47	0·49	1·59	14·4	80·1	103	9·62	5·01	0·29	1·01	7·11	58·3	100
Areas outside conurbation:														
Urban areas with populations of 100,000 and over	12·4	6·95	0·53	1·65	14·3	87·5	109	10·5	5·45	0·35	0·96	8·00	61·1	106
Urban areas with populations of 50,000 and under 100,000	12·4	7·28	0·42	1·65	13·8	80·7	103	9·96	5·33	0·35	1·06	6·98	57·8	100
Urban areas with populations under 50,000	12·6	6·67	0·49	1·69	13·7	80·7	102	10·9	4·80	0·26	1·04	7·64	60·3	104
Rural districts	11·2	5·64	0·51	1·58	11·6	72·6	91	10·1	4·69	0·32	0·95	7·17	55·5	97
SOUTH AND EAST OF ENGLAND (excluding Greater London)	12·1	5·46	0·44	1·39	12·0	75·9	93	11·3	4·09	0·29	0·89	6·55	55·0	94
Regions:														
London and South Eastern (excluding Greater London)	13·4	5·24	0·43	1·41	12·3	77·5	95	12·6	4·02	0·40	0·93	6·67	55·8	95
Southern	11·3	5·57	0·47	1·31	12·2	75·2	93	10·5	4·28	0·22	0·85	6·50	53·1	91
South Western	12·9	5·70	0·45	1·54	12·6	81·0	100	11·9	4·09	0·27	0·88	6·85	58·2	99
Eastern	10·8	5·33	0·43	1·31	10·9	70·2	86	10·1	3·99	0·28	0·92	6·20	52·6	90
Urban areas with populations of 100,000 and over	13·0	5·46	0·41	1·44	13·6	85·4	104	11·5	3·82	0·17	0·87	6·97	57·9	98
Urban areas with populations of 50,000 and under 100,000	12·0	5·14	0·43	1·39	12·4	80·1	97	11·7	3·87	0·27	0·96	6·63	55·6	95
Urban areas with populations under 50,000	12·5	5·58	0·42	1·33	12·3	75·7	94	11·5	4·24	0·29	0·91	6·42	54·3	93
Rural districts	11·2	5·45	0·49	1·42	10·8	70·5	87	10·7	4·16	0·36	0·87	6·45	54·1	92
GREATER LONDON	11·6	5·65	0·40	1·45	13·0	77·7	97	10·1	4·56	0·29	0·91	6·71	54·2	93

Table L. Deaths from certain causes: (a) by sex and age, (b) distinguishing deaths in which a post-mortem was performed or there was a record of operation, and (c) the percentage to all deaths, 1960, England and Wales

ICD No.	Cause of death		Males					Females					Persons
			All ages	0–	15–	45–	65 and over	All ages	0–	15–	45–	65 and over	All ages
	All causes	(a)	269,172	12,876	13,787	75,259	167,250	257,096	9,288	8,829	44,651	194,328	526,268
		(b)	73,014	6,290	7,060	26,382	33,282	51,132	4,327	3,699	13,070	30,036	124,146
		(c)	27	49	51	35	20	20	47	42	29	15	24
001–008	Tuberculosis, respiratory	(a)	2,342	2	233	1,111	996	763	8	211	267	277	3,105
		(b)	757	2	74	371	310	212	6	48	78	80	969
		(c)	32	100	32	33	31	28	75	23	29	29	31
010–019	Tuberculosis, other	(a)	160	13	41	55	51	170	13	39	50	68	330
		(b)	98	7	27	32	32	92	8	17	26	41	190
		(c)	61	54	66	58	63	54	62	44	52	60	58
020–029	Syphilitic disease	(a)	623	1	29	230	363	321	—	15	84	222	944
		(b)	292	1	14	106	171	174	—	10	36	128	466
		(c)	47	100	48	46	47	54	—	67	43	58	49
056	Whooping cough	(a)	20	19	1	—	—	17	17	—	—	—	37
		(b)	5	5	—	—	—	4	4	—	—	—	9
		(c)	25	26	—	—	—	24	24	—	—	—	24
057	Meningococcal infections	(a)	46	43	1	1	1	49	42	2	1	4	95
		(b)	30	28	1	1	—	41	35	1	1	4	71
		(c)	65	65	100	100	—	84	83	50	100	100	75
080	Acute poliomyelitis	(a)	19	2	12	4	1	4	3	—	—	1	23
		(b)	9	2	5	1	1	2	1	—	—	1	11
		(c)	47	100	42	25	100	50	33	—	—	100	48
085	Measles	(a)	13	12	—	1	—	18	17	1	—	—	31
		(b)	2	1	—	1	—	6	6	—	—	—	8
		(c)	15	8	—	100	—	33	35	—	—	—	26
Rem. 001–138	Other diseases classified as infective or parasitic	(a)	539	118	101	174	146	526	97	83	164	182	1,065
		(b)	253	74	56	79	44	216	56	44	66	50	469
		(c)	47	63	55	45	30	41	58	53	40	27	44
151	Malignant neoplasm: Stomach	(a)	7,846	1	234	3,038	4,573	6,107	—	150	1,406	4,551	13,953
		(b)	1,424	—	42	618	764	807	—	26	251	530	2,231
		(c)	18	—	18	20	17	13	—	17	18	12	16
162, 163	Trachea, bronchus, and lung	(a)	18,882	—	574	9,911	8,397	3,118	1	192	1,342	1,583	22,000
		(b)	3,538	—	107	1,911	1,520	628	—	43	241	344	4,166
		(c)	19	—	19	19	18	20	—	22	18	22	19

Mortality table — cause of death by code (rows shown as (a), (b), (c)). Column headings are not printed on this page; data columns are given in their printed left-to-right order.

Code	Cause		1	2	3	4	5	6	7	8	9	10	11
170	Breast	(a)	63	—	2	18	43	9,059	—	718	4,100	4,241	9,122
		(b)	6	—	1	2	3	1,598	—	154	758	686	1,604
		(c)	10	—	50	11	7	18	—	21	18	16	18
171–174	Uterus	(a)	—	—	—	—	—	4,088	1	457	1,764	1,866	4,088
		(b)	—	—	—	—	—	553	1	63	267	222	553
		(c)	—	—	—	—	—	14	100	14	15	12	14
204	Leukaemia and aleukaemia	(a)	1,476	210	273	429	564	1,218	151	168	368	531	2,694
		(b)	292	34	63	95	100	217	24	26	69	98	509
		(c)	20	16	23	22	18	18	16	15	19	18	19
Rem. 140–205	Other malignant and lymphatic neoplasms	(a)	24,512	248	1,415	7,786	15,063	22,419	210	1,244	7,115	13,850	46,931
		(b)	5,206	78	335	1,875	2,918	4,536	69	287	1,518	2,662	9,742
		(c)	21	31	24	24	19	20	33	23	21	19	21
260	Diabetes mellitus	(a)	1,193	11	86	298	798	2,366	15	74	435	1,842	3,559
		(b)	235	6	37	82	110	381	6	31	125	219	616
		(c)	20	55	43	28	14	16	40	42	29	12	17
330–334	Vascular lesions affecting central nervous system	(a)	31,006	50	513	6,155	24,288	45,216	35	540	5,936	38,705	76,222
		(b)	3,590	31	281	1,568	1,710	4,415	24	286	1,484	2,621	8,005
		(c)	12	62	55	25	7	10	69	53	25	7	11
420	Arteriosclerotic heart disease, including coronary disease	(a)	56,514	1	1,682	20,673	34,158	35,447	1	214	5,699	29,533	91,961
		(b)	21,015	1	1,164	9,399	10,451	9,327	1	118	1,943	7,265	30,342
		(c)	37	100	69	45	31	26	100	55	34	25	33
440–443	Hypertension with heart disease	(a)	4,678	1	43	1,021	3,613	6,616	—	31	739	5,846	11,294
		(b)	855	1	25	308	521	787	—	20	178	589	1,642
		(c)	18	100	58	30	14	12	—	65	24	10	15
410–416, 421–434	Other heart disease	(a)	28,038	46	728	3,842	23,422	42,878	35	818	3,825	38,200	70,916
		(b)	3,095	31	308	1,084	1,672	3,475	24	314	897	2,240	6,570
		(c)	11	67	42	28	7	8	69	38	23	6	9
444–468	Other circulatory disease	(a)	10,953	13	322	2,241	8,377	13,314	14	236	1,522	11,542	24,267
		(b)	3,389	10	144	1,082	2,153	3,673	8	117	757	2,791	7,062
		(c)	31	77	45	48	26	28	57	50	50	24	29
480–483	Influenza	(a)	553	28	61	163	301	545	27	29	91	398	1,098
		(b)	122	15	35	48	24	75	11	19	25	20	197
		(c)	22	54	57	29	8	14	41	66	27	5	18
490–493, 763	Pneumonia	(a)	12,269	1,703	336	1,791	8,439	12,806	1,232	234	1,168	10,172	25,075
		(b)	3,461	1,059	168	731	1,503	2,642	774	107	402	1,359	6,103
		(c)	28	62	50	41	18	21	63	46	34	13	24
500–502	Bronchitis	(a)	18,997	295	226	5,568	12,908	7,488	201	100	1,107	6,080	26,485
		(b)	3,098	221	88	1,166	1,623	1,115	144	36	237	698	4,213
		(c)	17	75	39	21	13	15	72	36	21	11	16
470–475, 510–527	Other diseases of respiratory system	(a)	3,465	124	159	1,183	1,999	1,564	64	95	324	1,081	5,029
		(b)	1,478	101	63	566	748	425	53	46	106	220	1,903
		(c)	43	81	40	48	37	27	83	48	33	20	38

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Table L—*continued*

ICD No.	Cause of death		Males All ages	Males 0–	Males 15–	Males 45–	Males 65 and over	Females All ages	Females 0–	Females 15–	Females 45–	Females 65 and over	Persons All ages	Persons 65 and over
540, 541	Ulcer of stomach and duodenum	(a)	3,165	3	146	979	2,037	1,540	4	38	261	1,237	4,705	1,237
		(b)	1,851	3	113	668	1,067	839	4	28	182	625	2,690	625
		(c)	58	100	77	68	52	54	100	74	70	51	57	51
543, 571, 572, 764	Gastritis, enteritis, and diarrhoea	(a)	1,048	282	79	220	467	1,494	180	78	248	988	2,542	988
		(b)	546	159	45	140	202	666	88	39	136	403	1,212	403
		(c)	52	56	57	64	43	45	49	50	55	41	48	41
590–594	Nephritis and nephrosis	(a)	2,005	61	387	678	879	1,709	46	211	502	950	3,714	950
		(b)	425	28	97	163	137	393	14	59	129	191	818	191
		(c)	21	46	25	24	16	23	30	28	26	20	22	20
610	Hyperplasia of prostate	(a)	3,259	—	1	189	3,069	—	—	—	—	—	3,259	—
		(b)	1,361	—	1	123	1,237	—	—	—	—	—	1,361	—
		(c)	42	—	100	65	40	—	—	—	—	—	42	—
640–689	Pregnancy, childbirth, abortion	(a)	—	—	—	—	—	310	—	307	3	—	310	—
		(b)	—	—	—	—	—	239	—	237	2	—	239	—
		(c)	—	—	—	—	—	77	—	77	67	—	77	—
750–759	Congenital malformations	(a)	2,696	2,166	226	201	103	2,426	1,993	166	186	81	5,122	81
		(b)	1,371	1,079	138	103	51	1,072	850	92	82	48	2,443	48
		(c)	51	50	61	51	50	44	43	55	44	59	48	59
Rem. 210–795	Other defined and ill-defined diseases	(a)	19,289	6,166	1,139	3,406	8,578	23,881	4,228	1,113	3,783	14,757	43,170	14,757
		(b)	6,743	2,571	553	1,529	2,090	6,845	1,703	556	1,614	2,972	13,588	2,972
		(c)	35	42	49	45	24	29	40	50	43	20	31	20
E810–E835	Motor vehicle accidents	(a)	4,754	408	2,362	1,091	893	1,889	214	434	490	751	6,643	751
		(b)	3,144	222	1,579	735	608	1,279	126	298	334	521	4,423	521
		(c)	66	54	67	67	68	68	59	69	68	69	67	69
E800–, E802, E840–, E962	All other accidents	(a)	5,510	808	1,376	1,365	1,961	5,567	406	270	651	4,240	11,077	4,240
		(b)	3,312	490	860	916	1,046	2,933	264	191	442	2,036	6,245	2,036
		(c)	60	61	62	67	53	53	65	71	68	48	56	48
E963, E970–E979	Suicide and self-inflicted injury	(a)	3,059	4	934	1,391	730	2,054	3	512	1,001	538	5,113	538
		(b)	1,896	4	591	855	446	1,387	2	351	670	364	3,283	364
		(c)	62	100	63	61	61	68	67	69	67	68	64	68
E964, E965, E980–E999	Homicide and operations of war	(a)	180	37	65	46	32	109	30	48	19	12	289	12
		(b)	115	26	45	24	20	78	21	34	14	9	193	9
		(c)	64	70	69	52	62	72	70	71	74	75	67	75

Table LI. Notifications of certain infectious diseases: Notification rates per 100,000 living, by sex and age, 1960, England and Wales

| | Scarlet fever | | Whooping cough | | Acute poliomyelitis | | | | Measles (excluding rubella) | | Diphtheria | | Dysentery | | Meningococcal infection | |
| | | | | | Paralytic | | Non-paralytic | | | | | | | | | |
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Under 1 year	23	23	781	804	1·6	0·56	—	1·1	754	802	—	—	225	210	27	18
1–	96	101	785	841	6·1	4·2	1·9	0·56	2,126	2,127	0·27	—	425	370	13	8·9
2–	275	239	911	1,031	4·9	2·3	0·54	1·1	2,764	2,715	0·27	—	477	440	8·2	6·9
3–	432	394	863	1,030	3·1	1·8	0·56	0·60	3,041	3,041	—	0·89	410	394	4·8	5·7
4–	599	562	896	1,007	1·8	4·9	2·0	0·62	3,227	3,258	—	0·31	392	344	6·1	4·0
5–	515	533	632	747	1·4	1·3	0·78	0·69	2,178	2,152	0·72	0·69	355	344	2·9	2·1
10–	117	130	65	89	0·43	0·45	0·90	0·56	99	101	0·37	0·22	139	116	1·4	2·1
15–	13	13	4·7	9·4	0·67	0·44	0·27	0·30	13	12	0·03	0·03	39	70	0·81	0·84
25 and over	1·1	1·0	1·6	2·9	0·26	0·12	0·06	0·08	1·3	1·8	0·01	0·03	30	40	0·31	0·22
All ages	74	67	125	129	0·68	0·45	0·29	0·24	370	327	0·11	0·11	95	94	1·6	1·1

| | Acute pneumonia | | Acute encephalitis | | | | Enteric or typhoid fever | | Paratyphoid fevers | | Erysipelas | | Food poisoning | |
| | | | Infective | | Post-infectious | | | | | | | | | |
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Under 5 years	81	71	0·93	0·58	0·82	0·58	0·33	0·23	1·8	1·7	1·2	1·2	50	38
5–	25	20	0·90	0·53	0·90	0·71	0·25	0·12	0·73	0·89	1·2	1·1	26	20
15–	18	14	0·28	0·32	0·20	0·17	0·31	0·19	0·37	0·53	3·2	3·9	13	17
45–	43	25	0·12	0·06	—	0·02	0·12	0·13	0·21	0·24	12	12	8·8	9·3
65 and over	77	49	—	0·03	—	—	0·14	0·09	0·10	0·30	14	13	10	12
All ages	37	27	0·37	0·26	0·29	0·22	0·24	0·15	0·48	0·56	5·9	6·9	17	16

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Table LI—*continued*

					Tuberculosis					
				Respiratory		Meninges and C.N.S.		Other	
				M	F	M	F	M	F
Under 5 years	..	..	..	24	20	1·3	1·5	3·3	3·2
5– ..	..	..	..	15	18	0·76	0·71	4·0	4·1
15– ..	..	..	..	59	63	0·47	0·68	6·2	11
25– ..	..	..	..	66	49	0·33	0·23	7·9	10
45– ..	..	..	..	88	23	0·23	0·19	3·2	4·2
65 and over	..	..	..	77	15	0·05	0·09	4·2	4·1
All ages	..	..	..	**60**	**33**	**0·45**	**0·42**	**5·1**	**6·4**

Table LII. Trend of Stillbirths per 1,000 total births, 1926 to 1960, and of deaths in the neonatal, post-neonatal and other age periods under 1 year per 1,000 live births, 1906 to 1960, England and Wales

| | Infant mortality per 1,000 live births* at various ages | | | | | | | | | | Stillbirths and infant deaths—rates per 1,000 total births† | | | | |
Period	Total infant mortality (under 1 year)	Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period — Under 1 day	Early neonatal period — 1 day and under 1 week	Post-neonatal period — 4 weeks and under 3 months	Post-neonatal period — 3 months and under 6 months	Post-neonatal period — 6 months and under 1 year	Stillbirths plus infant deaths under 1 year "birth wastage"	Stillbirths (late foetal deaths, at or over 28 weeks gestation)	Stillbirths plus infant deaths under 4 weeks "perinatal mortality"	Infant deaths at 1 week and over	Stillbirths plus infant deaths under 4 weeks
1906–1910	117·1	40·2	24·5	15·7	76·9	11·5	13·0	22·8	22·0	32·1	—	—	—	—	—
1911–1915	108·7	39·0	24·1	14·9	69·8	11·4	12·7	20·2	19·6	30·0	—	—	—	—	—
1916–1920	90·9	37·0	23·4	13·7	53·9	11·0	12·4	16·5	14·6	22·8	—	—	—	—	—
1921–1925	74·9	33·4	21·7	11·7	41·6	10·4	11·3	12·8	11·3	17·5	—	—	—	—	—
1926–1930	67·6	31·8	21·8	9·9	35·7	10·3	11·5	10·8	9·5	15·4	—	—	—	—	—
1931–1935	61·9	31·4	22·4	9·0	30·5	10·7	11·7	9·9	8·5	12·1	100·6	41·0	62·5	38·1	71·1
1936–1940	55·3	29·2	21·5	7·7	26·0	10·4	11·2	8·8	7·8	9·4	91·7	38·5	59·2	32·5	66·6
1941–1945	49·8	26·0	18·7	7·2	23·8	9·3	9·5	8·9	7·7	7·2	78·5	30·5	48·6	29·9	55·6
1946–1950	36·3	21·1	16·2	4·9	15·2	7·9	8·4	5·8	5·0	4·4	59·5	24·0	39·8	19·6	44·6
1951–1955	26·9	18·0	15·0	3·0	8·9	7·5	7·5	3·4	3·0	2·5	49·2	23·0	37·6	11·6	40·5
1956–1960	22·6	16·2	13·8	2·4	6·5	7·5	6·3	2·6	2·1	1·8	43·6	21·4	34·9	8·7	37·2
1928	65·3	31·1	21·6	9·5	34·2	10·4	11·2	10·7	9·3	14·2	102·6	40·1	60·8	41·7	69·9
1929	73·9	32·8	22·2	10·5	41·1	10·4	11·9	11·5	10·6	19·0	111·4	40·0	61·4	50·0	71·6
1930	60·2	30·9	22·0	8·9	29·3	10·4	11·6	9·7	7·9	11·7	98·3	40·8	61·9	36·4	70·4
1931	65·7	31·5	22·1	9·5	34·2	10·4	11·7	10·8	9·2	14·2	104·5	40·9	62·1	42·4	71·2
1932	64·5	31·5	22·4	9·2	33·0	10·6	11·8	10·8	9·0	13·2	103·7	41·3	62·8	40·8	71·6
1933	62·7	32·1	22·9	9·3	30·6	11·0	11·8	9·8	8·6	12·2	102·5	41·4	63·4	39·1	72·3
1934	59·3	31·4	22·7	8·7	27·9	10·9	11·8	8·9	7·7	11·3	96·7	40·5	62·2	34·5	70·5
1935	57·0	30·4	22·0	8·4	26·6	10·7	11·3	9·1	7·7	9·8	95·4	40·7	61·9	33·5	69·9
1936	58·7	30·2	21·9	8·2	28·5	10·7	11·3	9·3	8·3	10·9	95·9	39·7	60·8	35·2	68·7
1937	57·7	29·7	22·0	7·8	28·0	10·8	11·2	9·4	8·3	10·3	94·4	39·0	60·2	34·2	67·6
1938	52·8	28·3	21·1	7·1	24·5	10·3	10·8	8·2	7·3	9·0	88·9	38·3	58·6	30·4	65·5
1939	50·6	28·3	21·2	7·1	22·2	10·3	10·9	7·9	7·0	7·3	86·9	38·1	58·5	28·4	65·3
1940	56·8	29·6	21·3	8·3	27·2	9·8	11·5	9·3	8·2	9·7	92·5	37·2	57·7	34·7	65·7

* Rates based on related live births from 1926 to 1956.
† The births upon which these rates are based are for successive calendar years are numbers registered up to 1938 inclusive, and numbers of occurrences from 1939.

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Table LII—*continued*

Period	Infant mortality per 1,000 live births* at various ages										Stillbirths and infant deaths—rates per 1,000 total births†				
	Total infant mortality (under 1 year)	Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period			Stillbirths plus infant deaths under 1 year "*birth wastage*"	Stillbirths (late foetal deaths, at or over 28 weeks' gestation)	Stillbirths plus infant deaths under 1 week "*perinatal mortality*"	Infant deaths at 1 week and over	Stillbirths plus infant deaths under 4 weeks
						Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year					
1941	60·0	29·0	20·7	8·3	31·1	10·1	10·6	11·3	9·7	10·1	92·4	34·8	54·7	37·7	62·7
1942	50·6	27·2	19·6	7·7	23·4	9·6	10·0	8·7	7·5	7·2	81·1	33·2	52·1	29·0	59·4
1943	49·1	25·2	18·3	6·9	23·9	9·1	9·2	8·8	7·8	7·3	77·5	30·1	47·9	29·6	54·6
1944	45·4	24·4	17·5	6·9	21·1	8·8	8·8	8·0	7·0	6·1	70·9	27·6	44·5	26·3	51·1
1945	46·0	24·8	18·0	6·8	21·3	9·0	9·0	8·2	7·0	6·1	73·4	27·6	45·2	28·1	51·8
1946	42·9	24·5	17·8	6·7	18·4	8·7	9·1	7·1	6·1	5·2	66·9	27·2	44·3	22·6	50·7
1947	41·4	22·7	16·5	6·2	18·6	7·8	8·7	6·9	6·0	5·7	65·0	24·1	40·3	24·6	46·4
1948	33·9	19·7	15·6	4·1	14·2	7·8	7·9	5·5	4·4	3·9	56·8	23·2	38·5	18·4	42·5
1949	32·4	19·3	15·6	3·7	13·0	7·6	8·0	4·8	4·4	3·8	54·6	22·7	38·0	16·7	41·5
1950	29·6	18·5	15·2	3·3	11·1	7·2	8·0	4·3	3·7	3·1	51·7	22·6	37·4	14·3	40·7
1951	29·7	18·8	15·5	3·3	10·9	7·5	8·0	4·1	3·6	3·2	52·2	23·0	38·2	14·0	41·5
1952	27·6	18·3	15·2	3·2	9·3	7·6	7·6	3·7	3·0	2·6	49·6	22·7	37·5	12·1	40·6
1953	26·8	17·7	14·8	2·9	9·1	7·4	7·4	3·4	3·0	2·7	48·6	22·4	36·9	11·7	39·7
1954	25·4	17·7	14·9	2·8	7·7	7·6	7·4	3·0	2·6	2·1	48·4	23·5	38·1	10·3	40·8
1955	24·9	17·3	14·6	2·6	7·6	7·6	7·0	2·9	2·6	2·1	47·5	23·2	37·4	10·0	40·0
1956	23·7	16·8	14·2	2·6	6·9	7·4	6·8	2·7	2·3	1·8	46·0	22·9	36·7	9·2	39·3
1957	23·1	16·5	14·1	2·4	6·7	7·6	6·5	2·6	2·1	1·9	45·1	22·5	36·2	8·8	38·5
1958	22·5	16·2	13·8	2·4	6·4	7·5	6·3	2·6	2·1	1·7	43·6	21·5	35·0	8·6	37·3
1959	22·2	15·9	13·6	2·3	6·3	7·6	6·0	2·4	2·1	1·8	42·6	20·8	34·1	8·5	36·3
1960	21·8	15·5	13·3	2·2	6·3	7·5	5·8	2·5	2·1	1·6	41·1	19·8	32·8	8·3	35·0

* Rates based on related live births from 1926 to 1956.

† The births upon which these rates are based are based for successive calendar years are numbers registered up to 1938 inclusive, and numbers of occurrences from 1939.

Table LIII.   Stillbirths per 1,000 total births, and deaths in the early neonatal, late neonatal, and post-neonatal periods per 1,000 live births*, distinguishing illegitimacy, 1936 to 1960, England and Wales

			1936 to 1939	1940 to 1944	1945 to 1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
All infants	Stillbirths (late foetal deaths at or over 28 weeks' gestation)	.. Annual rate	38·8	32·3	24·9	22·6	23·0	22·7	22·4	23·5	23·2	22·9	22·5	21·5	20·8	19·8
		.. per cent of 1936–39	100	83	64	58	59	59	58	61	60	59	58	55	54	51
	Early neonatal deaths (Under 1 week)	.. Annual rate	21·6	19·3	16·7	15·2	15·5	15·2	14·8	14·9	14·6	14·2	14·1	13·8	13·6	13·3
		.. per cent of 1936–39	100	89	77	70	72	70	69	69	68	66	65	64	63	62
	Late neonatal deaths (1 week and under 4 weeks)	.. Annual rate	7·6	7·5	5·5	3·3	3·3	3·2	2·9	2·8	2·6	2·6	2·4	2·4	2·3	2·2
		.. per cent of 1936–39	100	99	72	43	43	42	38	37	34	34	32	32	30	29
	Post-neonatal deaths (4 weeks and under 1 year)	.. Annual rate	25·8	25·1	17·1	11·1	10·9	9·3	9·2	7·7	7·6	6·9	6·7	6·4	6·3	6·3
		.. per cent of 1936–39	100	97	66	43	42	36	36	30	29	27	26	25	24	24
Illegitimate infants	Stillbirths (late foetal deaths at or over 28 weeks' gestation)	.. Annual rate	49·6	39·9	31·4	29·1	31·6	29·7	29·8	29·2	28·8	29·0	28·7	28·4	27·4	24·9
		.. per cent of 1936–39	100	80	63	59	64	60	60	59	58	58	58	57	55	50
	Early neonatal deaths (under 1 week)	.. Annual rate	34·4	28·1	23·7	21·4	21·4	21·3	19·3	20·2	20·8	18·9	19·8	18·3	18·2	17·0
		.. per cent of 1936–39	100	82	69	62	62	62	56	59	60	55	58	53	53	49
	Late neonatal deaths (1 week and under 4 weeks)	.. Annual rate	10·9	10·7	8·3	4·5	4·3	3·9	3·2	3·5	3·1	2·7	2·9	2·3	2·5	2·6
		.. per cent of 1936–39	100	98	76	41	39	36	29	32	28	25	27	21	23	24
	Post-neonatal deaths (4 weeks and under 1 year)	.. Annual rate	41·6	35·8	23·5	13·6	12·8	9·8	10·6	8·3	7·8	7·1	7·3	7·2	6·7	6·9
		.. per cent of 1936–39	100	86	56	33	31	24	25	20	19	17	18	17	16	17

* Rates prior to 1957 per 1,000 related live births.

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Table LIV. Principal causes of death under 1 year: (a) Age-group distribution per cent of all deaths assigned to each cause, (b) Cause distribution per 1,000 total deaths in each age-group, 1960, England and Wales

Aetiological group	Cause of death (and ICD No.)	Number of infant deaths (under 1 year)	Age distribution per cent of total infant deaths assigned to each cause					Cause distribution per 1,000 total infant deaths in each age-group				
			Infant mortality (under 1 year)	Neonatal mortality			Post-neonatal mortality (4 weeks and under 1 year)	Infant mortality (under 1 year)	Neonatal mortality			Post-neonatal mortality (4 weeks and under 1 year)
				Under 4 weeks	Early (under 1 week)	Late (1 week and under 4 weeks)			Under 4 weeks	Early (under 1 week)	Late (1 week and under 4 weeks)	
	All causes	17,118	100	71	61	10	29	1,000	1,000	1,000	1,000	1,000
	Congenital malformations (750–759) ..	3,549	100	64	42	22	36	207	185	141	451	263
	Total causes mainly of prenatal and natal origin other than congenital malformations	8,670	100	99	95	4	1	506	704	789	188	17
Prenatal and natal group (including congenital malformations)	Intracranial and spinal injury at birth (760) .. Other birth injury (including maternal ante-partum haemorrhage) (761)	1,418	100	100	95	5	0	83	116	129	38	0
	Other birth injury (including maternal ante-partum haemorrhage) (761)	407	100	100	98	1	0	24	33	38	3	0
	Postnatal asphyxia and atelectasis (762) ..	2,676	100	99	97	2	1	156	217	248	33	5
	Attributed to maternal toxaemia (769) ..	135	100	99	98	1	1	8	11	13	1	0
	Erythroblastosis (770)	372	100	98	93	6	2	22	30	33	12	1
	Haemorrhagic disease of newborn (771) ..	204	100	100	89	11	0	12	17	17	13	0
	Ill-defined diseases of early infancy (773) ..	390	100	96	90	6	4	23	31	34	15	3
	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	3,068	100	99	95	4	1	179	249	278	72	7

Total causes mainly of postnatal origin	4,045	100	26	13	13	74	236	86	50	305	609
Postnatal group											
Causes classified as infective (001–138) and others mainly infective in origin (340, 391–393, 470–483, 518, 519, 690–698, 765–768)	464	100	31	10	21	69	27	12	4	57	65
Tuberculosis, other than tuberculous meningitis (001–008, 011–019)	7	100	14	—	14	86	0	0	—	1	1
Tuberculous meningitis (010)	3	100	—	—	—	100	0	—	—	—	1
Septicaemia, skin and subcutaneous tissue infections, and sepsis of newborn (053, 690–698, 765–768)	84	100	74	27	46	26	5	5	2	23	4
Whooping cough and measles (056, 085)	32	100	6	—	6	94	2	0	—	1	6
Meningococcal infections and non-meningococcal meningitis (057, 340)	175	100	31	10	21	69	10	4	2	22	25
Causes classified as infective not specified above (rem. 001–138)	64	100	22	6	16	78	4	1	0	6	10
Otitis media and mastoiditis, empyema and pleurisy (391–393, 518, 519)	50	100	14	—	14	86	3	1	—	4	9
Acute upper respiratory infections and influenza (470–475, 480–483)	49	100	8	4	4	92	3	0	0	1	9
Pneumonia and bronchitis (490–493, 763, 500–502)	2,772	100	27	15	13	73	162	62	39	206	408
Gastro-enteritis (including diarrhoea of new-born) (571, 764)	343	100	13	1	13	87	20	4	0	25	60
Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921–E925)	323	100	11	3	8	89	19	3	1	16	58
Lack of care, neglect (including foundlings), infanticide (E926, E980–985)	60	100	75	73	2	25	4	4	4	1	3
Other violent causes (rem. E800–E999)	83	100	16	13	2	84	5	1	1	1	14
Unclassified — Total causes remaining	854	100	36	25	11	64	50	25	20	56	111
Neoplasms (140–239)	79	100	24	18	6	76	5	2	1	3	12
Other remaining causes	775	100	37	25	12	63	45	24	19	53	99
Immaturity, or with mention of immaturity (774, 776, 760·5–773·5)	6,407	100	99	94	5	1	374	522	578	181	9
Immaturity alone, or primary to diseases other than of early infancy (774, 776)	3,068	100	99	95	4	1	179	249	278	72	7
Immaturity associated with diseases of early infancy (760·5–773·5)	3,339	100	100	94	6	0	195	273	300	109	2
All other causes	10,711	100	54	41	13	46	626	478	422	819	991

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Table LV. Principal causes of death under 1 year in the neonatal, post-neonatal and other age periods, by sex, per 1,000 live births, 1960, England and Wales

Aetiological group	Cause of death (and ICD No.)	Sex	Total infant mortality (under 1 year)	Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period: Under 1 day	Early neonatal period: 1 day and under 1 week	Post-neonatal period: 4 weeks and under 3 months	Post-neonatal period: 3 months and under 6 months	Post-neonatal period: 6 months and under 1 year
	All causes	M	24·52	17·76	15·37	2·40	6·76	8·53	6·83	2·78	2·24	1·74
		F	18·92	13·16	11·20	1·96	5·76	6·49	4·71	2·30	1·95	1·52
	Congenital malformations (750–759)	M	4·58	3·03	2·02	1·01	1·55	0·81	1·21	0·78	0·49	0·28
		F	4·46	2·71	1·75	0·96	1·75	0·83	0·92	0·77	0·55	0·43
	Total causes mainly of prenatal and natal origin other than congenital malformations	M	12·78	12·66	12·21	0·45	0·13	7·38	4·83	0·10	0·01	0·01
		F	9·20	9·11	8·74	0·37	0·09	5·38	3·36	0·07	0·01	0·01
Prenatal and natal group (including congenital malformations)	Intracranial and spinal injury at birth (760)	M	2·23	2·23	2·14	0·09	—	1·05	1·08	—	—	—
		F	1·35	1·35	1·28	0·07	0·00	0·68	0·60	0·00	—	—
	Other birth injury (including maternal antepartum haemorrhage) (761)	M	0·62	0·61	0·61	0·01	0·00	0·48	0·13	0·00	—	—
		F	0·41	0·41	0·40	0·01	—	0·29	0·11	—	—	—
	Postnatal asphyxia and atelectasis (762)	M	3·95	3·91	3·84	0·08	0·03	2·20	1·63	0·02	0·00	0·01
		F	2·84	2·80	2·74	0·07	0·03	1·73	1·01	0·02	0·01	0·01
	Attributed to maternal toxaemia (769)	M	0·21	0·21	0·20	0·00	—	0·10	0·10	—	—	—
		F	0·14	0·13	0·13	—	0·00	0·07	0·06	0·00	—	—
	Erythroblastosis (770)	M	0·49	0·48	0·46	0·03	0·01	0·31	0·15	0·01	0·00	0·00
		F	0·45	0·45	0·42	0·03	0·01	0·30	0·12	0·01	—	0·00
	Haemorrhagic disease of newborn (771)	M	0·31	0·31	0·27	0·03	—	0·07	0·20	—	—	—
		F	0·21	0·21	0·19	0·02	0·00	0·06	0·12	0·00	—	—
	Ill-defined diseases of early infancy (773)	M	0·57	0·54	0·51	0·03	0·02	0·25	0·26	0·02	0·00	0·00
		F	0·42	0·41	0·38	0·03	0·01	0·18	0·19	0·01	0·01	—
	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	M	4·41	4·36	4·19	0·17	0·06	2·90	1·28	0·05	0·00	—
		F	3·37	3·34	3·20	0·14	0·03	2·06	1·13	0·03	0·00	—

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	Sex	1	2	3	4	5	6	7	8	9	10
Total causes mainly of postnatal origin	M	5·85	1·59	0·82	0·77	4·26	0·18	0·64	1·58	1·51	1·17
	F	4·41	1·06	0·50	0·56	3·36	0·15	0·35	1·32	1·18	0·86
Causes classified as infective (001–138) and others mainly infective in origin (340, 391–393, 470–483, 518, 519, 690–698, 765–768)	M	0·67	0·21	0·07	0·14	0·46	0·01	0·06	0·15	0·14	0·17
	F	0·51	0·15	0·05	0·11	0·36	0·01	0·04	0·12	0·11	0·13
Pneumonia and bronchitis (490–493, 763, 500–502)	M	3·99	1·16	0·64	0·52	2·83	0·09	0·55	1·11	1·01	0·71
	F	3·05	0·77	0·39	0·38	2·27	0·09	0·31	0·94	0·83	0·50
Gastro-enteritis (including diarrhoea of newborn) (571, 764)	M	0·52	0·08	0·01	0·07	0·44	—	0·01	0·15	0·13	0·16
	F	0·35	0·03	—	0·03	0·31	—	—	0·09	0·08	0·14
Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921–E925)	M	0·45	0·05	0·02	0·03	0·40	—	0·02	0·15	0·19	0·06
	F	0·38	0·04	0·00	0·04	0·33	—	0·00	0·14	0·13	0·06
Lack of care, neglect (including foundlings), infanticide (E926, E980–E985)	M	0·09	0·07	0·07	0·00	0·02	0·07	0·00	0·00	0·00	0·01
	F	0·06	0·04	0·04	—	0·02	0·04	0·00	0·01	0·01	0·01
Other violent causes (rem. E800–E999)	M	0·14	0·02	0·01	0·00	0·12	0·01	0·00	0·02	0·03	0·06
	F	0·07	0·01	0·01	—	0·06	0·01	0·00	0·01	0·02	0·03
Total causes remaining	M	1·31	0·49	0·32	0·17	0·82	0·16	0·16	0·32	0·23	0·27
	F	0·86	0·29	0·22	0·07	0·57	0·14	0·08	0·14	0·21	0·21
Neoplasms (140–239)	M	0·10	0·02	0·02	0·01	0·08	0·01	0·01	0·02	0·02	0·04
	F	0·10	0·02	0·02	0·01	0·08	0·01	0·01	0·01	0·03	0·04
Other remaining causes	M	1·20	0·47	0·30	0·16	0·74	0·15	0·15	0·30	0·21	0·23
	F	0·76	0·26	0·20	0·07	0·49	0·12	0·07	0·14	0·19	0·17
Immaturity, or with mention of immaturity (774, 776, 760·5-773·5)	M	9·40	9·34	8·92	0·43	0·06	5·47	3·44	0·06	0·00	—
	F	6·84	6·80	6·43	0·36	0·05	3·82	2·61	0·04	0·00	—
Immaturity alone, or primary to diseases other than of early infancy (774, 776)	M	4·41	4·36	4·19	0·17	0·06	2·90	1·28	0·05	0·00	—
	F	3·37	3·34	3·20	0·14	0·03	2·06	1·13	0·03	0·00	—
Immaturity associated with diseases of early infancy (760·5-773·5)	M	4·99	4·99	4·73	0·26	0·00	2·57	2·16	0·00	—	—
	F	3·47	3·46	3·24	0·22	0·02	1·76	1·48	0·02	—	—
All other causes	M	15·12	8·42	6·45	1·97	6·70	3·06	3·39	2·72	2·24	1·74
	F	12·08	6·36	4·77	1·60	5·72	2·67	2·10	2·26	1·95	1·52

Row group labels in left margin: **Postnatal group**, **Unclassified**.

Table LVI. Stillbirths per 1,000 total births, and infant deaths per 1,000 live births in the early neonatal, late neonatal and post-neonatal periods, and from the principal causes of infant mortality; comparison of annual and quarterly rates, 1960, England and Wales

Aetiological group	Cause of death and ICD No.	Annual rates (per 1,000 live births)	Quarterly rates				Quarterly rates per cent of annual rates			
			Jan. to March	April to June	July to Sept.	Oct. to Dec.	Jan. to March	April to June	July to Sept.	Oct. to Dec.
Stillbirths (late foetal deaths at or over 28 weeks' gestation)		19·75	19·92	20·14	19·29	19·65	101	102	98	99
Early neonatal deaths (infant deaths at ages under 1 week)		13·34	13·45	12·85	13·13	13·97	101	96	98	105
Late neonatal deaths (infant deaths at ages 1 week and under 4 weeks)		2·19	2·51	2·11	1·91	2·22	115	96	87	101
Post-neonatal deaths (infant deaths at 4 weeks and under 1 year)		6·28	7·31	5·72	4·53	7·60	116	91	72	121
Infant deaths (total under 1 year)		21·81	23·27	20·68	19·58	23·78	107	95	90	109
Prenatal and natal group (including congenital malformations)	Congenital malformations (750–759)	4·52	4·48	4·45	4·39	4·77	99	98	97	106
	Total causes mainly of prenatal and natal origin, other than congenital malformations	11·04	11·13	10·50	10·97	11·61	101	95	99	105
	Intracranial and spinal injury at birth (760)	1·81	1·83	1·54	1·86	2·01	101	85	103	111
	Other birth injury (including maternal antepartum haemorrhage) (761)	0·52	0·48	0·50	0·49	0·61	92	96	94	117
	Postnatal asphyxia and atelectasis (762)	3·41	3·48	3·24	3·54	3·37	102	95	104	99
	Attributed to maternal toxaemia (769)	0·17	0·11	0·16	0·19	0·23	65	94	112	135
	Erythroblastosis (770)	0·47	0·47	0·50	0·42	0·50	100	106	89	106
	Haemorrhagic disease of newborn (771)	0·26	0·30	0·24	0·25	0·25	115	92	96	96
	Ill-defined diseases of early infancy (773)	0·50	0·41	0·50	0·54	0·54	82	100	108	108
	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	3·91	4·05	3·81	3·68	4·10	104	97	94	105
	Total causes mainly of postnatal origin	5·15	6·51	4·72	3·27	6·15	126	92	63	119
Postnatal group	Causes classified as infective (001–138); others mainly infective in origin (340, 391–393, 470–483, 518, 519, 690–698, 765–768)	0·59	0·71	0·63	0·39	0·64	120	107	66	108
	Pneumonia and bronchitis (490–493, 763, 500–502)	3·53	4·60	3·06	2·10	4·39	130	87	59	124
	Gastro-enteritis and diarrhoea of the newborn (571, 764)	0·44	0·54	0·43	0·31	0·46	123	98	70	105
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921–E925)	0·41	0·50	0·39	0·33	0·43	122	95	80	105
	Lack of care, neglect (including foundlings), infanticide (E926, E980–E985)	0·08	0·04	0·08	0·08	0·10	50	100	100	125
	Other violent causes (rem. E800–E999)	0·11	0·11	0·11	0·07	0·14	100	100	64	127
	Total causes remaining	1·09	1·15	1·02	0·94	1·26	106	94	86	116
Unclassified	Neoplasms (140–239)	0·10	0·13	0·08	0·07	0·13	130	80	70	130
	Other remaining causes	0·99	1·02	0·94	0·87	1·13	103	95	88	114
Immaturity, or with mention of immaturity (774,, 776, 760·5–773·5)		8·16	8·28	7·75	7·92	8·73	101	95	97	107
	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	3·91	4·05	3·81	3·68	4·10	104	97	94	105
	Immaturity associated with diseases of early infancy (760·5–773·5)	4·25	4·24	3·94	4·24	4·62	100	93	100	109
All other causes		13·64	14·98	12·93	11·66	15·06	110	95	85	110

Table LVII. Infant deaths at various ages per 1,000 live births, and combined stillbirths and infant deaths per 1,000 total births, in standard regions, conurbations, and urban and rural aggregates within regional groups, 1960, England and Wales

	Infant mortality per 1,000 live births					Early neonatal period		Post-neonatal period			Stillbirths and infant deaths. Rates per 1,000 total births				
	Total infant mortality (under 1 year)	Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year	Stillbirths plus infant deaths under 1 year	Stillbirths (late foetal deaths at or over 28 weeks' gestation)	Stillbirths plus infant deaths under 1 week	Infant deaths at 1 week and over	Stillbirths plus infant deaths under 4 weeks
ENGLAND AND WALES	21·81	15·53	13·34	2·19	6·28	7·54	5·80	2·55	2·10	1·63	41·13	19·75	32·83	8·30	34·98
Urban and rural aggregates: Conurbations	22·52	16·00	13·87	2·13	6·52	8·07	5·80	2·73	2·22	1·57	41·48	19·39	33·00	8·48	35·09
Areas outside conurbations: Urban areas with populations of 100,000 and over	22·96	16·24	13·78	2·46	6·72	7·57	6·22	2·66	2·38	1·69	42·59	20·08	33·59	9·00	36·00
Urban areas with populations of 50,000 and under 100,000	21·48	15·11	12·89	2·22	6·38	7·08	5·80	2·49	2·05	1·83	40·94	19·88	32·51	8·43	34·69
Urban areas with populations under 50,000	21·78	15·45	13·23	2·23	6·31	7·32	5·91	2·57	2·03	1·71	41·95	20·62	33·58	8·37	35·77
Rural districts	19·87	14·42	12·37	2·04	5·45	6·96	5·41	2·11	1·79	1·55	38·65	19·17	31·30	7·35	33·30
NORTH OF ENGLAND	24·76	17·10	14·61	2·50	7·66	8·51	6·09	3·30	2·56	1·80	46·11	21·89	36·17	9·93	38·61
Regions: Northern	24·66	17·43	14·81	2·61	7·24	8·33	6·48	3·00	2·61	1·63	46·36	22·25	36·73	9·63	39·28
East and West Ridings	22·99	15·99	13·76	2·23	7·01	8·00	5·76	3·04	2·33	1·64	43·38	20·87	34·34	9·04	36·52
North Western	25·90	17·62	15·02	2·60	8·28	8·92	6·10	3·61	2·68	1·99	47·65	22·33	37·01	10·63	39·56
Conurbations: Tyneside	24·15	17·56	14·83	2·73	6·59	8·43	6·40	2·09	2·85	1·65	45·51	21·89	36·40	9·12	39·06
West Yorkshire	24·39	16·79	14·44	2·35	7·60	8·84	5·60	2·90	2·80	1·90	44·30	20·41	34·55	9·75	36·85
South East Lancashire	26·13	17·99	15·47	2·53	8·14	9·24	6·22	3·63	2·76	1·75	47·81	22·26	37·38	10·43	39·85
Merseyside	27·33	17·34	14·87	2·47	9·99	9·11	5·76	4·59	3·28	2·12	48·53	21·80	36·34	12·19	38·76
Areas outside conurbations: Urban areas with populations of 100,000 and over	24·49	16·57	14·03	2·54	7·92	7·89	6·14	3·14	2·61	2·18	45·81	21·85	35·57	10·23	38·06
Urban areas with populations of 50,000 and under 100,000	23·76	17·07	14·46	2·61	6·68	8·20	6·27	3·19	1·98	1·51	44·71	21·46	35·61	9·10	38·17
Urban areas with populations under 50,000	24·90	17·50	14·79	2·70	7·41	8·25	6·55	3·38	2·46	1·56	46·86	22·52	36·98	9·88	39·62
Rural districts	21·92	15·67	13·60	2·06	6·25	7·94	5·66	2·75	1·75	1·75	43·54	22·11	35·41	8·13	37·43

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Table LVII—continued

	Infant mortality per 1,000 live births										Stillbirths and infant deaths. 1,000 total births			Rates per	
	Total infant mortality (under 1 year)	Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period: Under 1 day	Early neonatal period: 1 day and under 1 week	Post-neonatal period: 4 weeks and under 3 months	Post-neonatal period: 3 months and under 6 months	Post-neonatal period: 6 months and under 1 year	Stillbirths plus infant deaths under 1 year	Stillbirths (late foetal deaths at 28 weeks or over gestation)	Stillbirths plus infant deaths under 1 week	Infant deaths at 1 week and over	Stillbirths plus infant deaths under 4 weeks
WALES AND MIDLANDS	22·67	16·12	13·71	2·42	6·55	7·39	6·32	2·35	2·32	1·89	43·61	21·43	34·84	8·77	37·20
Regions:															
Wales	25·30	18·69	15·92	2·76	6·61	8·29	7·63	2·47	2·40	1·74	48·28	23·58	39·13	9·16	41·82
North Midland	21·83	14·81	12·58	2·23	7·02	6·96	5·62	2·36	2·55	2·12	41·99	20·60	32·93	9·06	35·11
Midland	21·92	15·76	13·39	2·37	6·17	7·24	6·14	2·28	2·10	1·79	42·37	20·91	34·01	8·36	36·33
Conurbation:															
West Midlands	21·94	15·74	13·91	1·83	6·20	7·68	6·22	2·30	2·21	1·69	42·08	20·59	34·21	7·87	36·01
Areas outside conurbation:															
Urban areas with populations of 100,000 and over ..	25·15	17·99	14·91	3·07	7·16	8·18	6·74	2·85	2·65	1·66	46·25	21·65	36·24	10·01	39·25
Urban areas with populations of 50,000 and under 100,000..	25·43	17·49	14·45	3·04	7·94	7·60	6·84	2·62	2·79	2·53	48·97	24·16	38·26	10·72	41·22
Urban areas with populations under 50,000	23·44	16·40	13·97	2·43	7·04	7·59	6·38	2·55	2·28	2·21	45·21	22·29	35·95	9·26	38·33
Rural districts	19·99	14·45	12·18	2·27	5·53	6·30	5·89	1·73	2·09	1·71	39·95	20·37	32·31	7·65	34·53
SOUTH AND EAST OF ENGLAND (excluding Greater London) ..	18·78	13·63	11·83	1·79	5·16	6·65	5·18	2·05	1·67	1·43	35·90	17·45	29·08	6·83	30·84
Regions:															
London and South Eastern (excluding Greater London) ..	18·44	13·15	11·42	1·73	5·29	6·43	5·00	2·36	1·52	1·41	35·24	17·12	28·34	6·90	30·04
Southern	18·84	13·54	11·73	1·81	5·30	6·75	4·98	2·04	1·73	1·53	34·75	16·22	27·75	7·00	29·54
South Western	19·25	14·43	12·48	1·95	4·82	7·01	5·47	1·95	1·61	1·26	37·15	18·25	30·51	6·65	32·42
Eastern	18·57	13·33	11·65	1·68	5·24	6·43	5·23	1·94	1·79	1·51	36·18	17·94	29·38	6·80	31·03
Urban areas with populations of 100,000 and over ..	19·44	14·20	12·43	1·77	5·25	6·67	5·76	2·05	1·91	1·28	36·07	16·96	29·18	6·89	30·91
Urban areas with populations of 50,000 and under 100,000..	18·31	12·79	11·17	1·62	5·52	6·11	5·06	1·97	1·79	1·76	35·02	17·03	28·01	7·01	29·60
Urban areas with populations under 50,000	18·52	13·45	11·68	1·77	5·07	6·52	5·15	2·05	1·57	1·45	36·35	18·17	29·63	6·72	31·37
Rural districts	18·91	13·85	11·97	1·89	5·06	6·97	4·99	2·09	1·62	1·35	35·31	17·12	28·88	6·83	30·73
GREATER LONDON	19·93	14·81	12·90	1·91	5·11	7·38	5·52	2·22	1·62	1·27	36·64	17·05	29·73	6·91	31·61

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Table LVIII. Infant deaths per 1,000 live births in regional groups from the principal causes of infant mortality; regional group rates as percentages of corresponding national rates, 1960, England and Wales

Aetiological group	Cause of death (and ICD No.)	Rates per 1,000 live births					Regional group rates per cent of England and Wales rate			
		England and Wales	North of England	Wales and Midlands	South and East of England (excluding Greater London)	Greater London	North of England	Wales and Midlands	South and East of England (excluding Greater London)	Greater London
	All causes	21·81	24·76	22·67	18·78	19·93	114	104	86	91
	Congenital malformations (750–759)	4·52	4·90	4·76	4·24	3·91	108	105	94	87
Prenatal and natal group (including congenital malformations)	Total causes mainly of prenatal and natal origin other than congenital malformations	11·04	12·19	11·27	9·60	10·90	110	102	87	99
	Intracranial and spinal injury at birth (760)	1·81	2·09	1·89	1·54	1·58	115	104	85	87
	Other birth injury (including maternal antepartum haemorrhage) (761)	0·52	0·54	0·49	0·51	0·54	104	94	98	104
	Postnatal asphyxia and atelectasis (762)	3·41	3·52	3·99	2·75	3·42	103	117	81	100
	Attributed to maternal toxaemia (769)	0·17	0·13	0·20	0·23	0·13	76	118	135	76
	Erythroblastosis (770)	0·47	0·43	0·46	0·45	0·61	91	98	96	130
	Haemorrhagic disease of newborn (771)	0·26	0·25	0·26	0·20	0·37	96	100	77	142
	Ill-defined diseases of early infancy (773)	0·50	0·61	0·49	0·34	0·55	122	98	68	110
	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	3·91	4·62	3·49	3·59	3·70	118	89	92	95
	Total causes mainly of postnatal origin	5·15	6·51	5·37	3·98	4·20	126	104	77	82
Postnatal group	Causes classified as infective (001–138) and others mainly infective in origin (340, 391–393, 470–483, 518, 519, 690–698, 765–768)	0·59	0·68	0·63	0·50	0·52	115	107	85	88
	Tuberculosis, other than tuberculous meningitis (001–008, 010–019)	0·01	0·02	—	0·00	0·02	200	—	50	200
	Tuberculous meningitis (010)	0·00	—	0·01	0·00	—	—	250	125	—
	Septicaemia, skin and subcutaneous tissue infections and sepsis of newborn (053, 690–698, 765–768)	0·11	0·15	0·07	0·07	0·13	136	64	64	118
	Whooping cough and measles (056, 085)	0·04	0·05	0·06	0·02	0·03	125	150	50	75

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Table LVIII—*continued*

Aetiological group	Cause of death (and ICD No.)	Rates per 1,000 live births					Regional group rates per cent of England and Wales rate			
		England and Wales	North of England	Wales and Midlands	South and East of England (excluding Greater London)	Greater London	North of England	Wales and Midlands	South and East of England (excluding Greater London)	Greater London
Postnatal group—*(contd.)*	Meningococcal infections and non-meningococcal meningitis (057, 340)	0·22	0·23	0·24	0·22	0·20	105	109	100	91
	Causes classified as infective not specified above (rem. 001–138) ..	0·08	0·10	0·13	0·04	0·05	125	162	50	62
	Otitis media and mastoiditis, empyema and pleurisy (391–393, 518, 519)	0·06	0·06	0·05	0·08	0·07	100	83	133	117
	Acute upper respiratory infections, and influenza (470–475, 480–483)	0·06	0·08	0·08	0·05	0·04	133	133	83	67
	Pneumonia and bronchitis (490–493, 763, 500–502)	3·53	4·45	3·66	2·62	3·10	126	104	74	88
	Gastro-enteritis (including diarrhoea of newborn) (571, 764)	0·44	0·72	0·42	0·27	0·20	164	95	61	45
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921–E925)	0·41	0·50	0·45	0·39	0·23	122	110	95	56
	Lack of care, neglect (including foundlings), infanticide (E926, E980–E985)	0·08	0·08	0·07	0·09	0·05	100	88	112	62
	Other violent causes (rem. E800–E999)	0·11	0·08	0·13	0·11	0·11	73	118	100	100
	Total causes remaining	1·09	1·16	1·27	0·96	0·91	106	117	88	83
Unclassified	Neoplasms (140–239) .. .. Other remaining causes	0·10 0·99	0·10 1·06	0·09 1·18	0·10 0·85	0·11 0·80	100 107	90 119	100 86	110 81
Immaturity, or with mention of immaturity (774, 776, 760·5–773·5) ..		8·16	9·18	8·42	6·81	8·07	112	103	83	99
Immaturity alone, or primary to diseases other than of early infancy (774, 776) .. .. Immaturity associated with diseases of early infancy (760·5–773·5)		3·91 4·25	4·62 4·55	3·49 4·94	3·59 3·22	3·70 4·37	118 107	89 116	92 76	95 103
All other causes		13·64	15·58	14·25	11·97	11·85	114	104	88	87

Table LIX. Trend of stillbirths, per 1,000 total births, and of deaths in the neonatal, and post-neonatal periods per 1,000 live births, in standard regions, 1956 to 1960, England and Wales

		Rates in each year 1956 to 1960					Rates in 1957 to 1960 per cent of rate in 1956			
		1956	1957	1958	1959	1960	1957	1958	1959	1960
Stillbirths (at or over 28 weeks' gestation) per 1,000 total births	ENGLAND AND WALES	22·9	22·5	21·5	20·8	19·8	98	94	91	86
	NORTH OF ENGLAND	24·7	25·0	23·5	22·3	21·9	101	95	90	89
	Northern	24·8	25·6	23·0	22·4	22·3	103	93	90	90
	East and West Ridings ..	22·7	23·5	22·7	20·9	20·9	104	100	92	92
	North Western ..	25·8	25·7	24·4	23·2	22·3	100	95	90	86
	WALES AND MIDLANDS	25·0	23·4	23·8	23·1	21·4	94	95	92	86
	Wales ..	26·8	25·8	26·3	26·3	23·6	96	98	98	88
	North Midland ..	24·8	22·0	22·9	21·2	20·6	89	92	85	83
	Midland ..	24·1	23·0	23·0	22·9	20·9	95	95	95	87
	SOUTH AND EAST OF ENGLAND (excluding Greater London)	21·1	20·3	18·7	18·7	17·5	96	89	89	83
	London and South Eastern (excluding Greater London)	19·5	20·0	18·2	18·6	17·1	103	93	95	88
	Southern	20·9	19·3	17·4	18·1	16·0	92	83	87	78
	South Western ..	23·3	21·4	20·4	19·7	18·3	92	88	85	79
	Eastern	20·4	20·4	18·8	18·5	17·9	100	92	91	88
	GREATER LONDON ..	19·3	19·5	18·9	17·9	17·1	101	98	93	89
Neonatal mortality per 1,000 live births	ENGLAND AND WALES	16·8	16·5	16·2	15·9	15·5	98	96	95	92
	NORTH OF ENGLAND	18·6	17·7	18·1	17·5	17·1	95	97	94	92
	Northern	18·9	18·6	18·6	18·0	17·4	98	98	95	92
	East and West Ridings ..	18·5	17·2	17·2	16·7	16·0	93	93	90	86
	North Western ..	18·6	17·5	18·4	17·8	17·6	94	99	96	95
	WALES AND MIDLANDS	18·1	17·8	17·0	16·8	16·1	98	94	93	89
	Wales ..	20·6	20·0	18·9	19·6	18·7	97	92	95	91
	North Midland ..	16·9	16·4	15·8	15·2	14·8	97	93	90	88
	Midland ..	17·6	17·6	16·9	16·6	15·8	100	96	94	90
	SOUTH AND EAST OF ENGLAND (excluding Greater London)	14·9	14·8	13·9	13·6	13·6	99	93	91	91
	London and South Eastern (excluding Greater London)	14·9	14·6	13·4	13·7	13·2	98	90	92	89
	Southern	15·0	14·8	14·8	13·3	13·5	99	99	89	90
	South Western ..	15·0	15·7	14·7	13·6	14·4	105	98	91	96
	Eastern	14·8	14·1	13·1	13·6	13·3	95	89	92	90
	GREATER LONDON ..	14·5	14·8	14·7	15·1	14·8	102	101	104	102
Post-neonatal mortality per 1,000 live births	ENGLAND AND WALES	6·8	6·7	6·4	6·3	6·3	99	94	93	93
	NORTH OF ENGLAND	8·1	8·1	7·3	7·4	7·7	100	90	91	95
	Northern	8·1	8·2	7·0	7·2	7·2	101	86	89	89
	East and West Ridings ..	7·6	7·8	7·2	7·6	7·0	103	95	100	92
	North Western ..	8·3	8·3	7·6	7·4	8·3	100	92	89	100
	WALES AND MIDLANDS	7·4	7·2	6·9	6·7	6·6	97	93	91	89
	Wales ..	8·1	8·4	7·6	6·7	6·6	104	94	83	81
	North Midland ..	7·3	6·6	6·8	6·7	7·0	90	93	92	96
	Midland ..	7·1	7·0	6·7	6·8	6·2	99	94	96	87
	SOUTH AND EAST OF ENGLAND (excluding Greater London)	5·7	5·4	5·5	5·3	5·2	95	96	93	91
	London and South Eastern (excluding Greater London)	6·7	5·4	5·3	5·4	5·3	81	79	81	79
	Southern	5·5	5·4	5·5	5·6	5·3	98	100	102	96
	South Western ..	5·2	5·3	6·2	5·4	4·8	102	119	104	92
	Eastern	5·7	5·7	5·0	5·0	5·2	100	88	88	91
	GREATER LONDON ..	5·3	5·0	5·2	5·4	5·1	94	98	102	96

Table LX. Maternal mortality: Deaths from principal causes, and

	MATERNAL MORTALITY (complications of pregnancy, childbirth and puerperium,								
	Puerperal phlebitis, thrombosis and embolism	Puerperal sepsis	Ante-partum haemorrhage	Post-partum haemorrhage	Toxaemia	Pro-longed labour	Trauma, shock: other complica-tion of delivery	Other causes	Total maternal causes other than abortion
ICD No.	682, 684	640, 641, 681	643, 644, 670	671, 672	642, 685, 686	673–675	676–678	Rem. 640–648 660–689	640–648 660–689
1931	215	712	330		494		507		2,258
1932	226	628	334		511		514		2,213
1933	206	694	310		508		533		2,251
1934	188	800	304		538		537		2,367
1935	192	647	292		488		507		2,126
1936	183	561	302		510		455		2,011
1937	152	347	307		510		457		1,773
1938	178	277	312		472		503		1,742
1939	154	248	117	179	478		467		1,643
1940	134	195	106	180	398	125	111	124	1,373
1941	134	141	101	210	381	155	109	122	1,353
1942	128	151	87	198	410	158	94	133	1,359
1943	136	132	86	187	375	165	106	112	1,299
1944	107	105	84	179	328	176	87	113	1,179
1945	86	82	68	158	321	148	72	92	1,027
1946	102	53	85	162	359	117	83	91	1,052
1947	110	33	56	156	312	110	63	77	917
1948	67	33	46	115	249	66	55	55	686
1949	56	32	38	90	199	69	60	65	609
1950	62	26	44	38	185	42	54	66	517
1951	49	16	35	53	141	38	37	50	419
1952	52	10	19	39	122	32	43	56	373
1953	49	17	39	51	143	31	34	55	419
1954	51	13	32	44	104	32	41	53	370
1955	55	17	24	41	91	31	23	57	339
1956	32	13	33	24	93	34	15	58	302
1957	32	18	27	22	77	27	23	46	272
1958	40	13	25	33	66	21	20	47	265
1959	30	17	21	23	57	18	26	51	243
1960	27	8	25	19	63	26	36	44	248

* Note.   *Excludes* the following cases in which it was stated that death followed the maternal
1955–34, 1956–25, 1957–16, 1958–22, 1959–21, 1960–26.

associated maternal mortality, 1931 to 1960, England and Wales

including abortion)						ASSOCIATED MATERNAL MORTALITY			Total attributed to, or associated with, maternal causes
Abortion				Abortion all forms	Total* maternal mortality	Associated with maternal causes other than abortion	Associated with abortion	Total associated mortality	
Criminal abortion		Spontaneous and other							
With sepsis	Without mention of sepsis	With sepsis	Without mention of sepsis						
651·2	650·2 652·2	Rem. 651	Rem. 650, 652	650–652	640–689				
52	27	229	140	448	2,706	834	77	911	3,617
46	23	262	139	470	2,683	623	90	713	3,396
56	29	257	144	486	2,737	731	97	828	3,565
67	33	295	118	513	2,880	683	64	747	3,627
64	30	262	108	464	2,590	638	74	712	3,302
49	24	242	105	420	2,431	541	70	611	3,042
56	28	176	109	369	2,142	585	104	689	2,831
54	26	173	101	354	2,096	449	81	530	2,626
80	28	167	79	354	1,997	429	49	478	2,475
43	33	116	76	268	1,641	368	56	424	2,065
66	24	145	90	325	1,678	358	47	405	2,083
64	12	175	62	313	1,672	363	49	412	2,084
76	15	166	64	321	1,620	437	57	494	2,114
75	7	168	63	313	1,492	383	52	435	1,927
65	9	109	50	233	1,260	342	19	361	1,621
41	5	69	42	157	1,209	353	37	390	1,599
37	3	54	49	143	1,060	264	44	308	1,368
34	4	55	32	125	811	231	16	247	1,058
20	9	58	31	118	727	157	19	176	903
25	21	39	18	103	620	180	21	201	821
33	26	34	14	107	526	151	9	160	686
19	28	28	15	90	463	153	8	161	624
17	24	22	13	76	495	121	7	128	623
10	25	22	19	76	446	116	5	121	567
17	15	19	15	66	405	108	7	115	520
20	16	20	16	72	374	119	6	125	499
15	15	18	13	61	333	122	6	128	461
8	12	27	16	63	328	94	4	98	426
13	10	16	8	47	290	75	7	82	372
12	18	21	11	62	310	70	5	75	385

condition after an interval of more than 12 months: 1951–40, 1952–35, 1953–32, 1954–34,

	MATERNAL MORTALITY (complications of pregnancy, childbirth and puerperium,								
	Puerperal phlebitis, thrombosis and embolism	Puerperal sepsis	Ante-partum haemor-rhage	Post-partum haemor-rhage	Toxaemia	Pro-longed labour	Trauma, shock: other complica-tion of delivery	Other causes	Total maternal causes other than abortion
ICD No.	682, 684	640, 641, 681	643, 644, 670	671, 672	642, 685, 686	673–675	676–678	Rem. 640–648 660–689	640–648 660–689
1931	33	108	50		75		77		343
1932	35	98	52		80		80		346
1933	34	115	51		84		88		372
1934	30	128	49		86		86		380
1935	31	104	47		78		81		341
1936	29	89	48		81		72		319
1937	24	55	48		80		72		279
1938	28	43	48		73		78		270
1939	24	39	18	28	75		73		257
1940	22	32	17	29	65	20	18	20	224
1941	22	24	17	35	64	26	18	20	226
1942	19	22	13	29	61	23	14	20	202
1943	19	19	12	27	53	23	15	16	184
1944	14	14	11	23	42	23	11	15	153
1945	12	12	10	23	46	21	10	13	147
1946	12	6	10	19	43	14	10	11	125
1947	12	4	6	17	35	12	7	9	102
1948	8	4	6	14	31	8	7	7	86
1949	7	4	5	12	27	9	8	9	81
1950	9	4	6	5	26	6	8	9	72
1951	7	2	5	8	20	5	5	7	60
1952	8	1	3	6	18	5	6	8	54
1953	7	2	6	7	20	4	5	8	60
1954	7	2	5	6	15	5	6	8	54
1955	8	2	4	6	13	5	3	8	50
1956	4	2	5	3	13	5	2	8	42
1957	4	2	4	3	10	4	3	6	37
1958	5	2	3	4	9	3	3	6	35
1959	4	2	3	3	7	2	3	7	32
1960	3	1	3	2	8	3	4	5	31

Note.   Figures for 1931 to 1938 are based on live and still birth registrations, and from

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associated maternal mortality. Death rates per 100,000 total births, England and Wales

Abortion						ASSOCIATED MATERNAL MORTALITY			Total attributed to, or associated with, maternal causes
Criminal abortion		Spontaneous and other		Abortion all forms	Total* maternal mortality	Associated with maternal causes other than abortion	Associated with abortion	Total associated mortality	
With sepsis	Without mention of sepsis	With sepsis	Without mention of sepsis						
651·2	650·2 652·2	Rem. 651	Rem. 650. 652	650, 652	640–689				
8	4	35	21	68	411	127	12	138	549
7	4	41	22	73	419	97	14	111	530
9	5	42	24	80	452	121	16	137	589
11	5	47	19	82	462	110	10	120	582
10	5	42	17	74	415	102	12	114	529
8	4	38	17	67	386	86	11	97	483
9	4	28	17	58	337	92	16	108	446
8	4	27	16	55	324	70	13	82	407
13	4	26	12	55	313	67	8	75	387
7	5	19	12	44	268	60	9	69	337
11	4	24	15	54	280	60	8	68	347
9	2	26	9	46	248	54	7	61	309
11	2	24	9	45	230	62	8	70	300
10	1	22	8	41	193	50	7	56	249
9	1	16	7	33	180	49	3	52	232
5	1	8	5	19	143	42	4	46	190
4	0	6	5	16	117	29	5	34	152
4	1	7	4	16	102	29	2	31	133
3	1	8	4	16	97	21	3	24	121
4	3	5	3	14	87	25	3	28	115
5	4	5	2	15	76	22	1	23	99
3	4	4	2	13	67	22	1	23	91
2	3	3	2	11	71	17	1	18	89
1	4	3	3	11	65	17	1	18	82
2	2	3	2	10	59	16	1	17	76
3	2	3	2	10	52	17	1	17	70
2	2	2	2	8	45	16	1	17	62
1	2	4	2	8	43	12	1	13	56
2	1	2	1	6	38	10	1	11	49
1	2	3	1	8	39	9	1	9	48

1939 onwards on occurrences.   * See footnote to Table LX.

Table LXII. Maternal mortality: Deaths attributed to or associated with abortion, 1931 to 1960, England and Wales

	Spontaneous or induced for therapeutic reasons		Induced for non-therapeutic reasons		Total attributed to abortion (including criminal)	Others associated with abortion	Total attributed to, or associated with, abortion	Percentage of deaths due to abortion which had mention of sepsis
	With sepsis	Without sepsis	With sepsis	Without sepsis*				
1931 ..	229	140	52	27	**448**	77	**525**	*63*
1932 ..	262	139	46	23	**470**	90	**560**	*66*
1933 ..	257	144	56	29	**486**	97	**583**	*64*
1934 ..	295	118	67	33	**513**	64	**577**	*71*
1935 ..	262	108	64	30	**464**	74	**538**	*70*
1936 ..	242	105	49	24	**420**	70	**490**	*69*
1937 ..	176	109	56	28	**369**	104	**473**	*63*
1938 ..	173	101	54	26	**354**	81	**435**	*64*
1939 ..	167	79	80	28	**354**	49	**403**	*70*
1940 ..	116	76	43	33	**268**	56	**324**	*59*
1941 ..	145	90	66	24	**325**	47	**372**	*65*
1942 ..	175	62	64	12	**313**	49	**362**	*76*
1943 ..	166	64	76	15	**321**	57	**379**	*75*
1944 ..	168	63	75	7	**313**	52	**367**	*78*
1945 ..	109	50	65	9	**233**	19	**253**	*75*
1946 ..	69	42	41	5	**157**	37	**194**	*70*
1947 ..	54	49	37	3	**143**	44	**184**	*64*
1948 ..	55	32	34	4	**125**	16	**139**	*71*
1949 ..	58	31	20	9	**118**	19	**137**	*66*
1950 ..	39	18	25	21	**103**	21	**124**	*62*
1951 ..	34	14	33	26	**107**	9	**116**	*63*
1952 ..	28	15	19	28	**90**	8	**98**	*52*
1953 ..	22	13	17	24	**76**	7	**83**	*51*
1954 ..	22	19	10	25	**76**	5	**81**	*42*
1955 ..	19	15	17	15	**66**	7	**75**	*56*
1956 ..	20	16	20	16	**72**	6	**78**	*56*
1957 ..	18	13	15	15	**61**	6	**67**	*54*
1958 ..	27	16	8	12	**63**	4	**67**	*56*
1959 ..	16	8	13	10	**47**	7	**54**	*62*
1960 ..	21	11	12	18	**62**	5	**67**	*53*

* Deaths due to attempted abortion, formerly classed to accidental causes, are included for years 1950 onwards.

Table LXIII. Deaths of women certified as due to pregnancy or childbearing, by age and cause, 1960, England and Wales

ICD No.	Cause of death	All ages	15–	20–	25–	30–	35–	40–	45 and over
640–648	**Complications of pregnancy**	**99**	**6**	**19**	**24**	**23**	**22**	**5**	—
640	Pyelitis and pyelonephritis of pregnancy ..	1	—	—	1	—	—	—	—
641	Other infections of genito-urinary tract during pregnancy	—	—	—	—	—	—	—	—
642	Toxaemias of pregnancy	60	6	12	14	13	12	3	—
643	Placenta praevia	—	—	—	—	—	—	—	—
644	Other haemorrhage of pregnancy.. ..	1	—	1	—	—	—	—	—
645	Ectopic pregnancy	17	—	2	5	7	2	1	—
646	Anaemia of pregnancy	2	—	1	—	1	—	—	—
647	Pregnancy with malposition of foetus in uterus	—	—	—	—	—	—	—	—
648	Other complications arising from pregnancy	18	—	3	4	2	8	1	—
650–652	**Abortion**	**62**	**3**	**12**	**18**	**13**	**11**	**4**	**1**
650	Abortion without mention of sepsis or toxaemia	23	—	4	8	6	4	1	—
651	Abortion with sepsis	33	3	8	6	6	6	3	1
652	Abortion with toxaemia, without mention of sepsis	6	—	—	4	1	1	—	—
660	**Delivery without mention of complication** ..	**3**	—	**1**	—	**1**	**1**	—	—
670–678	**Delivery with specified complication** ..	**105**	**4**	**8**	**23**	**31**	**26**	**12**	**1**
670	Delivery complicated by placenta praevia or antepartum haemorrhage	24	—	—	6	7	4	6	1
671	Delivery complicated by retained placenta	7	1	1	2	1	2	—	—
672	Delivery complicated by other post-partum haemorrhage	12	2	1	2	5	2	—	—
673	Delivery complicated by abnormality of bony pelvis	2	—	—	1	1	—	—	—
674	Delivery complicated by disproportion or malposition of foetus	10	—	1	3	3	2	1	—
675	Delivery complicated by prolonged labour of other origin	14	—	1	3	5	4	1	—
676	Delivery with laceration of perineum, without mention of other laceration ..	—	—	—	—	—	—	—	—
677	Delivery with other trauma	16	—	1	1	4	7	3	—
678	Delivery with other complications of childbirth	20	1	3	5	5	5	1	—
680–689	**Complications of the puerperium**	**41**	—	**9**	**8**	**11**	**9**	**3**	**1**
680	Puerperal urinary infection without other sepsis	1	—	1	—	—	—	—	—
681	Sepsis of childbirth and the puerperium ..	7	—	1	—	3	3	—	—
682	Puerperal phlebitis and thrombosis ..	19	—	3	5	5	4	2	—
683	Pyrexia of unknown origin during the puerperium	—	—	—	—	—	—	—	—
684	Puerperal pulmonary embolism	8	—	3	2	1	1	1	—
685	Puerperal eclampsia	2	—	—	—	2	—	—	—
686	Other forms of puerperal toxaemia ..	1	—	—	1	—	—	—	—
687	Cerebral haemorrhage in the puerperium..	2	—	1	—	—	—	—	1
688	Other and unspecified complications of the puerperium	1	—	—	—	—	1	—	—
689	Mastitis and other disorders of lactation	—	—	—	—	—	—	—	—
640–648 660–689	**Deliveries and complications of pregnancy, childbirth, and the puerperium (excluding abortion)**	**248**	**10**	**37**	**55**	**66**	**58**	**20**	**2**
640–689	**Deliveries and complications of pregnancy, childbirth, and the puerperium (including abortion)**	**310**	**13**	**49**	**73**	**79**	**69**	**24**	**3**

Note: *Excludes* 26 cases in which it was stated that death followed the maternal condition after an interval of more than 12 months.

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Table LXIV. Deaths of women not classed to pregnancy or childbearing, but certified as associated therewith, 1960, England and Wales

ICD No.	Cause of death	All ages	15–	20–	25–	30–	35–	40–	45 and over
053·4	Septicaemia ..	1	—	1	—	—	—	—	—
087·0	Chickenpox ..	1	—	—	—	1	—	—	—
140–199	Malignant neoplasms	10	—	1	3	2	4	—	—
201	Hodgkin's disease ..	1	—	1	—	—	—	—	—
204·3	Acute myeloid leukaemia ..	1	—	—	—	—	—	1	—
214	Uterine fibroids ..	2	—	—	—	—	2	—	—
216	Ovarian cyst (twisted)	1	—	—	1	—	—	—	—
226	Lipoma third cerebral ventricle	1	—	—	1	—	—	—	—
241	Status asthmaticus ..	1	—	—	—	—	1	—	—
260	Diabetes ..	1	—	1	—	—	—	—	—
322·2	Alcoholism ..	1	—	—	1	—	—	—	—
330–334	Vascular lesions affecting central nervous system	1	—	—	—	1	—	—	—
353·1	Status epilepticus ..	2	—	—	—	2	—	—	—
410	Diseases of mitral valve ..	13	—	—	5	3	3	2	—
416	Other heart disease specified as rheumatic	2	—	—	1	1	—	—	—
420·1	Coronary thrombosis ..	1	—	—	—	—	1	—	—
421·1	Aortic incompetence ..	1	—	—	1	—	—	—	—
422·0	Fatty myocardial degeneration ..	1	—	—	1	—	—	—	—
422·2	Myocardial degeneration ..	1	—	—	—	1	—	—	—
430·0	Subacute bacterial endocarditis ..	1	—	—	—	1	—	—	—
434·4	Organic heart disease ..	1	1	—	—	—	—	—	—
444	Hypertension ..	1	—	—	—	1	—	—	—
451	Medial necrosis of aorta ..	1	—	1	—	—	—	—	—
452	Other aneurysm, except of heart and aorta	2	—	—	1	1	—	—	—
490–493	Pneumonia ..	5	—	—	2	1	1	1	—
526	Bronchiectasis ..	1	—	—	—	1	—	—	—
540·1	Perforated gastric ulcer ..	1	—	—	1	—	—	—	—
541·1	Perforated duodenal ulcer ..	1	—	—	—	—	1	—	—
550·1	Appendicitis with peritonitis ..	1	—	1	—	—	—	—	—
561·0	Strangulated inguinal hernia ..	1	—	—	—	—	1	—	—
570	Intestinal obstruction without mention of hernia ..	3	1	—	—	1	—	1	—
571·1	Enterocolitis..	1	—	—	1	—	—	—	—
578	Ulceration of caecum ..	1	—	—	—	1	—	—	—
585	Cholecystitis ..	1	—	—	—	1	—	—	—
722·0	Rheumatoid arthritis ..	1	—	—	1	—	—	—	—
744	Other diseases of muscle, tendon and fascia	2	—	—	1	—	—	1	—
754	Congenital malformations of circulatory system	4	—	1	1	1	1	—	—
757·1	Polycystic kidney disease ..	1	—	—	—	—	1	—	—
E800–E999	Accidents, poisonings, violence ..	2	—	—	1	1	—	—	—
	Total ..	75	2	7	23	21	16	6	—
	Associated with abortion (included above) ..	5	—	1	2	1	1	—	—

Table LXV. Tuberculosis of the respiratory system: Death rates per million living, by sex and age, 1931 to 1960, England and Wales

	0–	5–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over
Males											
1931–35 ..	85	42	64	490	963	961	1,140	1,368	1,176	723	275
1936–40 ..	61	20	44	366	742	785	937	1,210	1,216	718	296
1941–45 ..	76	24	34	339	581	674	811	1,114	1,203	741	295
1946 ..	68	22	23	239	481	615	687	1,020	1,165	768	340
1947 ..	77	15	29	241	500	632	679	1,034	1,213	812	267
1948 ..	56	10	14	211	445	603	633	961	1,166	881	334
1949 ..	33	6	13	127	368	496	591	869	1,153	927	380
1949* ..	34	7	14	127	366	497	592	869	1,159	937	400
1950* ..	38	9	8	78	229	395	428	751	1,024	891	411
1951* ..	30	7	7	46	171	292	364	636	978	953	464
1952* ..	15	4	10	35	102	201	287	503	829	843	447
1953* ..	14	4	3	18	71	156	214	413	712	814	445
1954* ..	9	2	1	13	55	130	192	370	643	778	406
1955* ..	3	1	1	8	30	93	151	307	535	705	420
1956* ..	7	1	2	7	14	71	113	231	456	640	463
1957* ..	3	—	2	3	12	40	105	193	410	605	436
1958* ..	3	1	2	6	13	38	85	166	401	572	416
1959* ..	4	—	—	2	6	31	73	141	325	528	480
1960* ..	1	—	—	3	1	20	55	121	297	492	436
Females											
1931–35 ..	74	43	143	840	1,138	911	646	475	394	306	170
1936–40 ..	55	24	98	658	1,016	759	511	377	339	272	160
1941–45 ..	72	24	76	591	916	692	427	304	269	220	123
1946 ..	60	25	69	468	842	662	382	261	242	207	119
1947 ..	70	24	63	502	899	730	411	267	249	224	133
1948 ..	52	19	53	462	812	702	367	255	235	218	105
1949 ..	33	9	30	349	684	622	348	253	245	229	127
1949* ..	33	10	30	351	682	622	348	254	249	236	139
1950* ..	29	8	15	199	429	444	273	229	212	212	144
1951* ..	25	8	14	108	278	347	238	192	180	198	135
1952* ..	18	5	6	58	169	230	166	131	148	150	159
1953* ..	17	5	3	32	122	174	146	116	130	162	140
1954* ..	11	2	3	31	84	143	145	104	107	137	117
1955* ..	6	2	4	12	56	113	101	84	95	111	115
1956* ..	4	1	—	6	35	80	79	62	70	111	125
1957* ..	4	1	—	6	12	70	75	53	55	80	91
1958* ..	3	1	1	6	14	48	58	51	69	99	101
1959* ..	4	1	1	2	7	33	44	46	53	86	95
1960* ..	3	1	1	3	3	26	40	42	44	77	91

* According to the Seventh (1955) Revision of the International List. Throughout the rest of the table rates are according to the Fifth (1938) Revision.

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Table LXVI. Tuberculosis of the respiratory system: Notification rates* per 100,000 living, by sex and age, 1938 to 1960, England and Wales

	All ages	0–	5–	15–	25–	35–	45–	65 and over
				Males				
1938	108	20	42	141	137	136	136	52
1939	98	17	32	132	124	124	125	46
1940	104	17	29	145	146	128	123	43
1941	115	20	33	154	155	148	141	50
1942	117	22	38	165	148	153	142	49
1943	119	27	40	166	144	154	152	50
1944	122	30	41	180	158	142	149	56
1945	118	32	40	178	160	135	142	53
1946	119	32	46	179	174	125	138	54
1947	118	40	53	193	163	116	137	56
1948	117	44	51	215	161	117	139	64
1949	119	46	49	180	159	122	146	68
1950	111	53	49	159	154	107	135	67
1951	115	53	48	170	156	117	141	72
1952	112	52	51	165	147	116	135	77
1953	110	49	49	155	133	114	139	85
1954	100	41	40	143	125	106	126	82
1955	92	36	34	125	110	96	121	81
1956	88	29	28	115	101	92	121	87
1957	82	26	23	99	97	90	114	87
1958	76	25	21	89	86	81	108	87
1959	70	21	17	70	79	79	102	89
1960	60	24	15	59	65	68	88	77
				Females				
1938	77	18	42	175	129	72	42	19
1939	71	15	33	166	116	68	37	18
1940	70	17	30	168	120	66	35	16
1941	76	19	33	185	126	69	41	19
1942	78	20	34	204	130	70	37	18
1943	83	26	40	209	142	73	40	18
1944	86	26	40	227	150	75	38	16
1945	81	26	41	223	140	69	34	16
1946	80	28	49	213	141	65	35	16
1947	83	33	51	235	146	66	35	17
1948	86	46	58	244	151	68	35	17
1949	85	44	53	238	155	71	35	17
1950	82	43	52	238	152	69	31	16
1951	81	50	52	229	149	68	33	16
1952	80	49	53	216	148	71	35	16
1953	77	45	52	201	141	73	34	18
1954	68	37	44	187	124	63	30	17
1955	60	35	38	156	112	59	30	17
1956	55	30	31	139	101	57	29	18
1957	49	30	27	116	90	55	29	17
1958	43	25	24	97	79	47	26	17
1959	39	22	19	83	69	49	25	16
1960	33	20	18	63	60	39	23	15

* Notifications of tuberculosis used in this and subsequent tables for 1956 onwards are those returned to the General Register Office, and not, as in previous years, those returned to the Ministry of Health. There is a small but insignificant difference between the figures from the two sources. Cases of unstated age are omitted for 1956 onwards.

Table LXVII. Tuberculosis of the respiratory system: Ratio of deaths to 100 notifications*, by sex and age, 1938 to 1960, England and Wales

	Males						Females					
	All ages	0–	15–	25–	45–	65 and over	All ages	0–	15–	25–	45–	65 and over
1938 ..	60	13	38	60	85	112	55	16	45	60	80	115
1939 ..	67	14	38	64	96	133	59	19	46	65	93	124
1940 ..	65	15	35	61	100	139	64	23	53	68	96	139
1941 ..	59	20	33	55	87	121	59	26	48	65	81	110
1942 ..	52	13	27	48	78	121	50	18	39	55	79	106
1943 ..	53	13	25	48	81	121	46	16	35	51	73	102
1944 ..	48	11	22	44	76	110	42	15	30	47	70	111
1945 ..	48	11	22	44	76	118	44	16	31	51	76	117
1946 ..	47	10	18	42	78	119	43	12	31	51	72	110
1947 ..	47	9	17	45	81	116	44	12	30	54	74	114
1948 ..	46	6	16	43	75	112	39	8	27	49	71	107
1949 ..	42	4	13	38	68	112	35	5	22	43	71	114
1950 ..	38	4	9	31	64	111	28	4	13	33	70	116
1951 ..	33	3	6	24	55	112	22	3	9	27	56	110
1952 ..	27	2	4	19	47	93	16	2	5	18	40	96
1953 ..	23	2	3	15	38	82	14	2	4	15	36	85
1954 ..	23	1	2	14	38	80	14	1	3	15	35	77
1955 ..	21	0	2	12	33	76	12	1	2	13	29	66
1956 ..	19	1	1	10	27	67	10	0	2	10	23	66
1957 ..	18	1	1	8	25	63	10	1	1	10	19	51
1958 ..	18	1	1	7	25	60	11	1	1	9	23	60
1959 ..	17	1	1	7	22	58	9	1	1	7	19	55
1960 ..	18	0	0	6	22	61	10	1	0	7	19	54

* See footnote to Table LXVI.

Table LXVIII. Tuberculosis of the respiratory system: Death rates per million living, by sex and age, and notifications* per 100 deaths in standard regions, conurbations, and urban and rural aggregates within regional groups, 1960, England and Wales

	Males							Females							Persons	
	All ages	0–	5–	15–	25–	45–	65 and over	All ages	0–	5–	15–	25–	45–	65 and over	All ages	Notifications per 100 deaths
ENGLAND AND WALES	106	1	—	2	38	197	474	32	3	1	3	33	43	83	68	680
Urban and rural aggregates:																
Conurbations	114	2	—	3	39	208	545	31	8	—	3	35	36	81	70	774
Areas outside conurbations:																
Urban areas with populations of 100,000 and over	141	4	—	3	56	279	588	39	—	—	—	46	55	95	88	608
Urban areas with populations of 50,000 and under 100,000	110	—	—	—	37	208	497	32	—	—	4	39	27	98	69	650
Urban areas with populations under 50,000	103	—	—	—	31	189	448	33	3	3	3	30	50	79	67	623
Rural districts	73	—	—	1	32	129	325	29	—	—	4	22	49	77	51	621
NORTH OF ENGLAND	124	2	—	1	48	229	559	36	2	2	4	47	47	83	79	569
Regions:																
Northern	107	—	—	—	52	215	448	42	—	—	4	67	51	94	74	723
East and West Ridings	124	—	—	4	42	243	521	32	—	3	11	38	49	59	77	574
North Western	133	4	—	4	51	227	640	36	4	2	—	42	44	93	82	498
Conurbations ..	132	4	—	3	45	240	635	36	4	—	7	47	45	83	81	581
Tyneside	94	—	—	11	27	192	444	43	—	—	16	61	53	94	68	1,172
West Yorkshire	101	10	—	—	14	168	526	31	—	—	19	44	36	54	64	751
South East Lancashire	142	—	—	—	56	268	608	31	—	—	—	33	40	86	84	501
Merseyside	174	—	—	—	75	321	981	47	16	—	—	65	62	111	107	335
Areas outside conurbations:																
Urban areas with populations of 100,000 and over	163	—	—	—	80	280	754	40	—	—	—	70	55	60	99	512
Urban areas with populations of 50,000 and under 100,000	146	—	—	—	42	308	566	37	—	—	—	49	26	129	89	470
Urban areas with populations under 50,000	104	—	—	—	40	179	474	39	—	9	5	45	48	99	71	651
Rural districts	84	—	—	—	49	174	299	28	—	—	—	25	60	50	56	535

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	115				40	237	490	34			3	31	53	89	74	650
WALES AND MIDLANDS	115	—	—	—	40	237	490	34	—	—	3	31	53	89	74	650
Regions:																
Wales	179	—	—	—	71	326	746	45	—	—	6	26	94	96	111	501
North Midland	79	—	—	—	35	153	329	27	—	—	—	30	39	70	53	738
Midland	107	—	—	—	29	248	456	32	—	—	3	34	41	101	69	731
Conurbation:																
West Midlands	114	—	—	—	27	275	483	26	—	—	—	43	20	77	69	930
Areas outside conurbation:																
Urban areas with populations of 100,000 and over	153	—	—	—	54	309	689	48	—	—	—	44	75	139	99	532
Urban areas with populations of 50,000 and under 100,000	110	—	—	—	65	229	358	23	—	—	23	33	23	46	66	693
Urban areas with populations under 50,000	133	—	—	—	47	267	528	34	—	—	5	22	69	75	82	555
Rural districts	74	—	—	—	29	122	366	31	—	—	—	20	54	90	52	655
SOUTH AND EAST OF ENGLAND (excluding Greater London)	82	2	—	2	24	147	370	30	2	—	3	27	38	79	55	713
Regions:																
London and South Eastern (excluding Greater London)	111	—	—	—	18	185	491	31	—	—	—	19	44	82	68	513
Southern	80	—	—	—	32	150	370	30	—	—	—	32	31	91	55	780
South Western	79	—	—	—	27	153	308	30	—	—	5	28	50	60	54	809
Eastern	65	7	—	7	19	110	324	27	7	—	4	27	26	87	46	782
Urban areas with populations of 100,000 and over	112	12	—	—	37	247	379	30	—	—	—	29	37	85	69	820
Urban areas with populations of 50,000 and under 100,000	87	—	—	—	23	128	501	32	—	—	—	35	29	97	58	804
Urban areas with populations under 50,000	80	—	—	6	13	137	382	29	6	—	—	27	39	70	53	674
Rural districts	68	—	—	—	27	115	310	29	—	—	7	22	41	79	49	639
GREATER LONDON	100	—	—	—	38	167	491	28	14	—	—	25	32	80	62	922

* See footnote to Table LXVI.

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Table LXIX. Tuberculosis of the respiratory system: Notification rates* per 100,000 living, by sex and age, in standard regions, 1960, England and Wales

	Males							Females							Persons
	All ages	0–	5–	15–	25–	45–	65 and over	All ages	0–	5–	15–	25–	45–	65 and over	All ages
ENGLAND AND WALES	**60**	**24**	**15**	**59**	**66**	**88**	**77**	**33**	**20**	**18**	**63**	**49**	**23**	**15**	**46**
Standard regions:															
Northern	65	34	21	62	64	100	86	43	25	28	77	65	29	14	53
East and West Ridings ..	60	19	12	48	71	85	84	30	15	16	58	45	22	10	44
North Western	53	17	10	53	54	86	66	30	19	13	69	43	19	15	41
North Midland	50	22	10	59	57	71	54	28	12	16	55	44	18	13	39
Midland	66	28	20	66	75	96	74	35	27	23	69	50	22	12	51
Eastern	46	16	17	48	52	64	53	26	12	20	48	39	18	11	36
London and South Eastern ..	70	25	12	75	76	97	97	35	27	17	64	52	25	19	51
Southern	53	30	11	43	63	84	57	33	20	17	58	48	25	20	41
South Western	59	20	30	50	68	80	69	29	13	21	47	49	21	12	43
Wales	70	29	21	60	69	107	104	41	23	21	78	58	30	23	55
Wales I (South East)	67	28	18	64	66	102	93	41	21	24	75	61	27	23	54
Wales II (remainder)	79	32	29	51	75	121	127	41	30	15	85	49	37	23	59

* See footnote to Table LXVI.

Table LXX. Tuberculosis of the respiratory system: Ratio of deaths to 100 notifications*, by sex and age, in standard regions, 1960, England and Wales

| | Deaths per 100 notifications | | | | | | | |
| | Males | | | | Females | | | |
	15–	25–	45–	65 and over	15–	25–	45–	65 and over
ENGLAND AND WALES ..	0	6	22	61	0	7	19	54
Standard regions:								
Northern	—	8	22	52	1	10	18	66
East and West Ridings ..	1	6	28	62	2	8	22	59
North Western	—	10	27	97	—	10	24	64
North Midland	—	6	22	61	—	7	21	55
Midland	—	4	26	62	0	7	18	86
Eastern	—	4	17	61	1	7	14	80
London and South Eastern ..	0	4	18	50	—	4	14	41
Southern	1	5	18	65	—	7	12	45
South Western	1	4	19	45	1	6	24	52
Wales (including Monmouthshire)	—	10	31	72	1	5	31	41
Wales I (South East) ..	—	11	29	76	—	3	35	41
Wales II (remainder) ..	—	9	33	65	2	11	24	43

* See footnote to Table LXVI.

Table LXXI. Tuberculosis of the respiratory system: Standardised Mortality Ratios and standardised notification ratios*, by sex, in standard regions, conurbations, and urban and rural aggregates, 1960, England and Wales

	Males		Females	
	S.M.R.	S.N.R.	S.M.R.	S.N.R.
ENGLAND AND WALES	100	100	100	100
Regions and conurbations:				
Northern	105	109	139	128
Tyneside Conurbation	93	165	142	186
Remainder of Northern	110	90	138	107
East and West Ridings	116	99	102	90
West Yorkshire Conurbation	92	108	94	100
Remainder of East and West Ridings	133	92	108	83
North Western	125	88	112	92
South East Lancashire Conurbation	135	95	97	87
Merseyside Conurbation	183	51	156	124
Remainder of North Western	93	100	106	79
North Midland	75	83	86	85
Midland	108	111	105	106
West Midlands Conurbation	117	146	86	126
Remainder of Midland	100	78	125	86
Eastern	61	77	85	80
London and South Eastern	94	114	85	107
Greater London	94	127	84	117
Remainder of London and South Eastern ..	95	77	89	78
Southern	78	89	91	101
South Western	71	98	91	90
Wales (including Monmouthshire)	163	116	142	125
Wales I (South East)	154	111	133	124
Wales II (remainder)	187	130	165	127
Urban and rural aggregates:				
Conurbations	109	119	95	116
Areas outside conurbations:				
Urban areas with populations of 100,000 and over	135	120	123	111
Urban areas with populations of 50,000 and under 100,000	104	95	98	105
Urban areas with populations under 50,000 ..	94	94	102	86
Rural districts	69	65	92	78

* See footnote to Table LXVI.

Table LXXII. Non-respiratory tuberculosis: Death rates per million living, by sex and age, 1938 to 1960, England and Wales

		Males					Females				
		All ages	0–	15–	25–	45 and over	All ages	0–	15–	25–	45 and over
1938–40 ..	..	117	221	136	79	67	93	201	121	59	46
1941–45 ..	..	131	236	195	98	62	96	213	141	59	45
1946 ..	..	93	180	120	60	54	75	165	107	50	35
1947 ..	..	87	179	96	53	52	73	153	109	48	35
1948 ..	..	72	134	79	45	52	62	130	84	41	34
1949 ..	..	62	107	69	41	46	47	92	60	34	29
1950 ..	..	47	75	44	34	40	40	76	54	22	29
1951 ..	..	44	70	38	33	37	37	69	44	21	30
1952 ..	..	33	43	27	23	36	24	38	25	16	23
1953 ..	..	24	29	17	18	30	21	30	18	12	23
1954 ..	..	21	16	15	18	30	17	13	15	12	22
1955 ..	..	17	11	12	14	26	13	14	5·3	8·5	18
1956 ..	..	13	7·3	4·4	11	20	11	5·6	7·6	9·2	16
1957 ..	..	12	7·2	6·5	11	19	12	8·6	6·5	8·0	17
1958 ..	..	12	5·4	7·1	9·4	20	9·5	5·8	3·2	6·1	16
1959 ..	..	8·7	6·0	2·1	6·3	15	8·1	4·5	2·8	5·4	13
1960 ..	..	7·2	2·4	2·4	5·7	14	7·2	2·5	2·7	5·1	12

Table LXXIII. Non-respiratory tuberculosis: Notification rates* per million living, by sex and age, 1938 to 1960, England and Wales

		Males					Females				
		All ages	0–	15–	25–	45 and over	All ages	0–	15–	25–	45 and over
1938–40 ..	..	290	744	341	151	72	264	641	403	172	61
1941–45 ..	..	269	698	326	148	64	261	632	413	178	63
1946 ..	..	217	569	250	123	53	210	518	334	149	47
1947 ..	..	202	518	227	114	54	196	455	317	144	51
1948 ..	..	197	505	243	99	53	199	473	333	138	46
1949 ..	..	171	423	211	93	50	174	399	304	127	40
1950 ..	..	151	350	186	93	48	164	343	288	139	39
1951 ..	..	149	327	196	98	48	159	314	300	131	46
1952 ..	..	135	275	196	91	50	146	272	242	135	54
1953 ..	..	122	233	163	85	59	133	224	240	129	51
1954 ..	..	109	192	149	93	48	133	199	245	140	56
1955 ..	..	96	145	154	85	48	109	144	203	126	48
1956 ..	..	87	121	131	83	49	98	113	188	118	49
1957 ..	..	76	91	119	74	49	93	103	162	121	46
1958 ..	..	70	75	106	82	44	83	77	142	111	50
1959 ..	..	58	53	86	71	40	67	55	114	88	46
1960 ..	..	56	47	67	82	36	69	48	113	103	43

* See footnote to Table LXVI.

Table LXXIV. Mass miniature radiography: Number of examinations made by mas

(The total numbers of examinations have bee

Category of person examined	Males											
	Under 14	14	15–	20–	25–	35–	45–	55–	60–	65 and over	Not stated	All ages
Out-patients and in-patients of hospitals	70	10	380	540	1,190	1,280	1,740	790	700	890	—	7,5
H.M. Forces intakes ..	—	10	740	27,710	400	100	60	—	—	—	50	29,0
School children (Mantoux test)	2,330	2,320	1,690	40	—	—	—	—	—	—	—	6,3
School children (School groups)	1,200	2,360	17,260	180	—	—	—	—	—	—	—	21,0
Contacts (Mantoux test) ..	460	220	420	260	150	590	330	90	50	50	—	2,6
Other contacts	1,490	870	3,270	1,990	2,980	2,630	2,080	740	380	650	—	17,0
Persons covered by special surveys	270	490	3,810	3,400	8,600	7,940	5,560	2,220	1,610	2,210	20	36,1
Persons in prisons, borstals, etc.	50	10	3,760	4,010	4,270	2,780	1,800	790	690	1,560	10	19,7
Persons in factories/offices (General surveys)	—	450	106,050	125,030	271,480	276,150	252,680	95,460	53,830	14,360	250	1,195,7
General public volunteers ..	650	710	31,840	34,780	83,270	82,090	77,480	29,610	20,590	28,350	50	389,4
Ante-natal cases												
Psychiatric hospitals ..	70	20	1,810	1,660	3,580	5,310	6,340	2,830	2,390	4,110	30	28,1
Total	6,590	7,470	171,030	199,600	375,920	378,870	348,070	132,530	80,240	52,180	410	1,752,9
Persons referred by general practitioners	2,100	670	8,400	9,740	18,940	18,070	20,000	9,640	8,200	9,010	20	104,
Total (all groups)	8,690	8,140	179,430	209,340	394,860	396,940	368,070	142,170	88,440	61,190	430	1,857,

					Females							Persons	Category of person examined
der 4	14	15–	20–	25–	35–	45–	55–	60–	65 and over	Not stated	All ages	All ages	
20	20	460	970	1,610	1,830	2,110	970	870	1,230	10	10,100	17,690	Out-patients and in-patients of hospitals
–	—	—	20	—	—	—	—	—	—	—	20	29,090	H.M. Forces intakes
,200	2,340	1,290	80	—	—	—	—	—	—	10	5,920	12,300	School children (Mantoux test)
760	1,610	13,780	160	—	—	—	—	—	—	—	16,310	37,310	School children (School groups)
330	190	310	210	210	880	580	10	30	60	10	2,820	5,440	Contacts (Mantoux test)
,050	650	3,170	1,940	2,210	2,410	2,170	630	430	520	60	15,240	32,320	Other contacts
300	320	4,020	3,770	8,620	8,470	7,870	2,900	2,320	2,740	—	41,330	77,460	Persons covered by special surveys
60	10	210	100	120	240	280	190	130	880	10	2,230	21,960	Persons in prisons, borstals, etc.
—	280	143,020	119,440	102,440	100,290	83,990	24,760	7,880	2,610	150	584,860	1,780,600	Persons in factories/offices (General surveys)
450	680	46,020	46,740	96,100	101,300	82,960	31,370	23,580	26,570	70	455,840	845,260	General public volunteers
—	—	2,240	6,860	9,820	2,420	10	—	—	—	20	21,370	21,370	Ante-natal cases
70	10	750	1,510	2,520	3,990	5,480	2,820	3,320	7,800	30	28,300	56,450	Psychiatric hospitals
,240	6,110	215,270	181,800	223,650	221,830	185,450	63,650	38,560	42,410	370	1,184,340	2,937,250	Total
,080	590	11,020	12,250	18,430	15,370	14,160	6,060	3,980	5,800	30	89,770	194,560	Persons referred by general practitioners
,320	6,700	226,290	194,050	242,080	237,200	199,610	69,710	42,540	48,210	400	1,274,110	3,131,810	Total (all groups)

Table LXXV. Mass miniature radiography: (a) Numbers of cases of respiratory tuberculosi[s] per 1,000 examinations, by sex, age, and categor[y]

Category of person examined		Males											
		Under 14	14	15–	20–	25–	35–	45–	55–	60–	65 and over	Not stated	All ages
Out-patients and in-patients of hospitals	(a)	—	—	2	1	4	1	3	2	2	2	—	1
	(b)	0·0	0·0	5·3	1·9	3·4	0·8	1·7	2·5	2·9	2·2	—	2
H.M. Forces intakes	(a)	—	—	—	34	—	—	—	—	—	—	—	3
	(b)	—	0·0	0·0	1·2	0·0	0·0	0·0	—	—	—	0·0	1
School children (Mantoux test)	(a)	3	6	7	—	—	—	—	—	—	—	—	
	(b)	1·3	2·6	4·1	0·0	—	—	—	—	—	—	—	2
School children (School groups)	(a)	3	3	3	—	—	—	—	—	—	—	—	
	(b)	2·5	1·3	0·2	0·0	—	—	—	—	—	—	—	0
Contacts (Mantoux test)	(a)	—	—	—	—	2	2	6	1	—	—	—	4
	(b)	0·0	0·0	0·0	0·0	13·3	3·4	18·2	11·1	0·0	0·0	—	
Other contacts	(a)	2	—	2	7	10	15	13	6	—	6	—	
	(b)	1·3	0·0	0·6	3·5	3·4	5·7	6·2	8·1	0·0	9·2	—	3
Persons covered by special surveys	(a)	1	—	3	7	10	17	25	5	4	10	—	
	(b)	3·7	0·0	0·8	2·1	1·2	2·1	4·5	2·3	2·5	4·5	0·0	2
Persons in prisons, borstals, etc.	(a)	—	—	3	4	17	16	23	13	5	9	—	4
	(b)	0·0	0·0	0·8	1·0	4·0	5·8	12·8	16·5	7·2	5·8	0·0	
Persons in factories/offices (General surveys)	(a)	—	—	72	126	240	259	280	129	74	24	—	1,2
	(b)	—	0·0	0·7	1·0	0·9	0·9	1·1	1·4	1·4	1·7	0·0	1
General public volunteers	(a)	—	—	33	50	95	116	123	56	44	82	—	5
	(b)	0·0	0·0	1·0	1·4	1·1	1·4	1·6	1·9	2·1	2·9	0·0	1
Ante-natal cases	(a)	—	—	—	—	—	—	—	—	—	—	—	
	(b)	—	—	—	—	—	—	—	—	—	—	—	
Psychiatric hospitals	(a)	—	—	2	4	13	14	21	10	7	13	—	8
	(b)	0·0	0·0	1·1	2·4	3·6	2·6	3·3	3·5	2·9	3·2	0·0	3
Total	(a)	9	9	127	233	391	440	494	222	136	146	—	2,2
	(b)	1·4	1·2	0·7	1·2	1·0	1·2	1·4	1·7	1·7	2·8	0·0	1
Persons referred by general practitioners	(a)	7	1	47	82	193	188	219	122	99	100	2	1,0
	(b)	3·3	1·5	5·6	8·4	10·2	10·4	11·0	12·7	12·1	11·1	100·0	1
Total (all groups)	(a)	16	10	174	315	584	628	713	344	235	246	2	3,7
	(b)	1·8	1·2	1·0	1·5	1·5	1·6	1·9	2·4	2·7	4·0	4·7	

	Females											Persons	Category of person examined
	14	15–	20–	25–	35–	45–	55–	60–	65 and over	Not stated	All ages	All ages	
(a)	—	1	1	2	2	1	1	1	1	—	10	27	Out-patients and in-patients of hospitals
(b)	0·0	2·2	1·0	1·2	1·1	0·5	1·0	1·1	0·8	0·0	1·0	1·5	
(a)	—	—	—	—	—	—	—	—	—	—	—	34	H.M. Forces intakes
(b)	—	—	0·0	—	—	—	—	—	—	—	0·0	1·2	
(a)	5	4	—	—	—	—	—	—	—	—	21	37	School children (Mantoux test)
(b)	2·1	3·1	0·0	—	—	—	—	—	—	0·0	3·5	3·0	
(a)	3	2	—	—	—	—	—	—	—	—	9	18	School children (School groups)
(b)	1·9	0·1	0·0	—	—	—	—	—	—	—	0·6	0·5	
(a)	—	1	—	1	2	—	—	—	—	—	6	17	Contacts (Mantoux test)
(b)	0·0	3·2	0·0	4·8	2·3	0·0	0·0	0·0	0·0	0·0	2·1	3·1	
(a)	1	6	9	11	8	4	—	3	2	—	50	111	Other contacts
(b)	1·5	1·9	4·6	5·0	3·3	1·8	0·0	7·0	3·8	0·0	3·3	3·4	
(a)	—	4	6	12	12	13	4	1	1	—	54	136	Persons covered by special surveys
(b)	0·0	1·0	1·6	1·4	1·4	1·7	1·4	0·4	0·4	—	1·3	1·8	
(a)	—	—	1	1	1	—	—	1	—	—	4	94	Persons in prisons, borstals, etc.
(b)	0·0	0·0	10·0	8·3	4·2	0·0	0·0	7·7	0·0	0·0	1·8	4·3	
(a)	—	107	141	111	76	50	10	1	6	—	502	1,706	Persons in factories/offices (General surveys)
(b)	0·0	0·7	1·2	1·1	0·8	0·6	0·4	0·1	2·3	0·0	0·9	1·0	
(a)	—	38	59	125	109	51	27	14	24	—	449	1,048	General public volunteers
(b)	0·0	0·8	1·3	1·3	1·1	0·6	0·9	0·6	0·9	0·0	1·0	1·2	
(a)	—	—	12	25	6	—	—	—	—	—	43	43	Ante-natal cases
(b)	—	0·0	1·7	2·5	2·5	0·0	—	—	—	0·0	2·0	2·0	
(a)	—	1	1	4	8	6	2	—	—	—	22	106	Psychiatric hospitals
(b)	0·0	1·3	0·7	1·6	2·0	1·1	0·7	0·0	0·0	0·0	0·8	1·9	
(a)	9	164	230	292	224	125	44	21	34	—	1,170	3,377	Total
(b)	1·5	0·8	1·3	1·3	1·0	0·7	0·7	0·5	0·8	0·0	1·0	1·1	
(a)	2	51	79	136	83	74	31	23	17	—	501	1,561	Persons referred by general practitioners
(b)	3·4	4·6	6·4	7·4	5·4	5·2	5·1	5·8	2·9	0·0	5·6	8·0	
(a)	11	215	309	428	307	199	75	44	51	—	1,671	4,938	Total (all groups)
(b)	1·6	1·0	1·6	1·8	1·3	1·0	1·1	1·0	1·1	0·0	1·3	1·6	

Table LXXVI. Mass miniature radiography: (a) Numbers, (b) rates per 1,000 examinations of non-tuberculous conditions diagnosed following examination, by sex and age, 1960, England and Wales

Category of person		Males												Females												Persons
		Under 14	14	15-	20-	25-	35-	45-	55-	60-	65 and over	Not stated	All ages	Under 14	14	15-	20-	25-	35-	45-	55-	60-	65 and over	Not stated	All ages	All ages
Malignant neoplasms																										
All groups, *excluding* persons referred by general practitioners	(a)	—	—	2	2	10	54	216	222	219	212	—	937	—	—	1	3	1	15	24	22	31	47	—	144	1,081
	(b)			0·0	0·0	0·0	0·1	0·6	1·7	2·7	4·1		0·5			0·0	0·0	0·0	0·1	0·1	0·3	0·8	1·1		0·1	0·4
Persons referred by general practitioners	(a)	—	—	1	1	11	60	280	249	235	425	—	1,262	—	—	—	2	2	17	45	34	37	54	—	191	1,453
	(b)			0·1	0·1	0·6	3·3	14·0	25·8	28·7	47·2		12·0				0·2	0·1	1·1	3·2	5·6	9·3	9·3		2·1	7·5
Total (all groups)	(a)	—	—	3	3	21	114	496	471	454	637	—	2,199	—	—	1	5	3	32	69	56	68	101	—	335	2,534
	(b)			0·0	0·0	0·1	0·3	1·3	3·3	5·1	10·4		1·2			0·0	0·0	0·0	0·1	0·3	0·8	1·6	2·1		0·3	0·8
Non-malignant neoplasms																										
All groups, *excluding* persons referred by general practitioners	(a)	—	—	2	8	22	40	59	39	39	44	—	253	—	—	9	3	14	28	72	41	35	61	—	263	516
	(b)			0·0	0·0	0·0	0·1	0·2	0·3	0·5	0·8		0·1			0·0	0·0	0·1	0·1	0·4	0·6	0·9	1·4		0·2	0·2
Persons referred by general practitioners	(a)	—	—	—	—	6	7	7	10	5	14	—	49	—	—	1	—	2	1	4	3	1	8	—	20	69
	(b)					0·3	0·4	0·2	1·0	0·5	1·6		0·5			0·1		0·1	0·1	0·3	0·5	0·3	1·4		0·2	0·4
Total (all groups)	(a)	—	—	2	8	28	47	66	49	44	58	—	302	—	—	10	3	16	29	76	44	36	69	—	283	585
	(b)			0·0	0·0	0·1	0·1	0·2	0·3	0·5	0·9		0·2			0·0	0·0	0·1	0·1	0·4	0·6	0·8	1·4		0·2	0·2
Lymphadenopathies, excluding sarcoids																										
All groups, *excluding* persons referred by general practitioners	(a)	1	—	1	3	7	4	1	3	1	3	—	24	—	1	3	3	10	3	3	1	—	1	—	25	49
	(b)	0·2		0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·1		0·0		0·2	0·0	0·0	0·0	0·0	0·0	0·0		0·0		0·0	0·0
Persons referred by general practitioners	(a)	2	—	2	3	—	1	—	1	—	—	—	9	1	—	3	3	4	2	—	—	—	1	—	14	23
	(b)	1·0		0·2	0·3		0·1		0·1				0·1	0·5		0·3	0·2	0·2	0·1				0·2		0·2	0·1
Total (all groups)	(a)	3	—	3	6	7	5	1	4	1	3	—	33	1	1	6	6	14	5	3	1	—	2	—	39	72
	(b)	0·3		0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0		0·0	0·1	0·1	0·0	0·0	0·1	0·0	0·0	0·0		0·0		0·0	0·0
Sarcoids, including enlarged hilar glands																										
All groups, *excluding* persons referred by general practitioners	(a)	1	—	13	52	95	42	37	9	2	4	—	255	—	—	9	34	77	40	27	13	2	6	—	208	463
	(b)	0·2		0·1	0·3	0·3	0·1	0·1	0·1	0·0	0·1		0·1			0·0	0·2	0·3	0·2	0·1	0·2	0·1	0·1		0·2	0·2
Persons referred by general practitioners	(a)	—	—	1	12	14	9	9	7	6	1	—	59	—	—	6	8	31	21	14	5	5	3	—	93	152
	(b)				1·2	0·7	0·5	0·7	0·7	0·7			0·6			0·5	0·8	1·7	1·0	1·0	0·5	1·3	0·5		1·0	0·8
Total (all groups)	(a)	1	—	14	64	109	51	46	16	8	5	—	314	—	—	15	44	108	61	41	16	7	9	—	301	615
	(b)	0·1		0·1	0·3	0·3	0·1	0·1	0·1	0·1	0·1		0·2			0·1	0·2	0·4	0·3	0·2	0·2	0·2	0·2		0·2	0·2

Congenital cardiac abnormalities and abnormalities of the vascular system

All groups, *excluding* persons referred by general practitioners (a)	407	195	1	5	4	3	21	27	39	23	64	6	2	212	4	7	13	34	36	48	32	37	1	3
(b)	0·1	0·2	2·7	0·1	0·1	0·0	0·1	0·1	0·2	0·1	0·3	1·0	0·4	0·1	0·1	0·1	0·1	0·1	0·1	0·2	0·2	0·2	0·2	1·4
Persons referred by general practitioners (a)	65	34	—	2	1	3	4	7	6	3	7	—	1	31	3	—	2	5	4	3	4	6	—	1
(b)	0·3	0·4	—	0·3	0·3	0·5	0·3	0·5	0·5	0·2	0·6	—	0·5	0·3	0·3	—	0·2	0·2	0·2	0·2	0·4	0·7	—	1·5
Total (all groups) (a)	472	229	1	7	5	6	25	34	45	26	71	6	3	243	7	7	15	39	40	51	36	43	1	4
(b)	0·2	0·2	2·5	0·1	0·1	0·1	0·1	0·1	0·2	0·1	0·3	0·9	0·4	0·1	0·1	0·1	0·1	0·1	0·1	0·1	0·2	0·2	0·1	0·5

Acquired cardiac abnormalities and abnormalities of the vascular system

All groups, *excluding* persons referred by general practitioners (a)	5,787	3,158	1	769	470	592	735	286	149	77	77	3	3	2,629	605	469	512	557	228	128	76	50	1
(b)	2·0	2·7	2·4	18·1	12·2	9·3	4·0	1·3	0·7	0·4	0·4	0·6	0·6	1·5	11·6	5·8	3·9	1·6	0·6	0·3	0·4	0·3	0·2
Persons referred by general practitioners (a)	1,994	975	3	359	151	117	179	71	65	17	14	1	1	1,019	347	178	170	190	66	38	15	7	—
(b)	10·2	10·9	150·0	61·9	37·9	19·3	12·6	4·6	3·5	1·4	1·3	1·7	0·5	9·7	38·5	21·7	17·6	9·5	3·7	2·0	1·5	0·8	—
Total (all groups) (a)	7,781	4,133	4	1,128	621	709	914	357	214	94	91	4	4	3,648	952	647	682	747	294	166	91	57	2
(b)	2·5	3·2	9·3	23·4	14·6	10·2	4·6	1·5	0·9	0·5	0·4	0·5	0·5	2·0	15·6	7·3	4·8	2·0	0·7	0·4	0·4	0·3	0·2

Pneumoconiosis without progressive massive fibrosis

All groups, *excluding* persons referred by general practitioners (a)	1,530	58	—	10	11	27	8	2	—	—	—	1,472	203	246	337	497	164	24
(b)	0·5	0·0	—	0·3	0·2	0·1	0·0	0·0	—	—	—	0·8	3·9	3·1	2·5	1·4	0·4	0·1
Persons referred by general practitioners (a)	538	40	5	7	9	16	2	1	—	—	—	498	57	85	104	179	63	10
(b)	2·8	0·4	0·9	1·8	1·5	1·1	0·1	0·1	—	—	—	4·8	6·3	10·4	10·8	9·0	3·5	0·5
Total (all groups) (a)	2,068	98	5	17	20	43	10	3	—	—	—	1,970	260	331	441	676	227	34
(b)	0·7	0·1	0·1	0·4	0·3	0·2	0·0	0·0	—	—	—	1·1	4·2	3·7	3·1	1·8	0·6	0·1

Pneumoconiosis with progressive massive fibrosis

All groups, *excluding* persons referred by general practitioners (a)	149	4	—	2	1	2	1	•	—	145	28	30	38	39	9	1
(b)	0·1	0·0	—	0·0	0·0	0·0	0·0		—	0·1	0·5	0·4	0·3	0·1	0·0	0·0
Persons referred by general practitioners (a)	53	4	—	2	1	2	—	—	—	49	16	6	11	14	2	—
(b)	0·3	0·0	—	0·3	0·1	0·3	—	—	—	0·5	1·8	0·7	1·1	0·7	0·1	—
Total (all groups) (a)	202	8	—	2	2	4	2	—	—	194	44	36	49	53	11	1
(b)	0·1	0·0	—	0·0	0·0	0·1	0·0	—	—	0·1	0·7	0·4	0·3	0·1	0·0	0·0

Table LXXVII. Deaths from cancer by sex and age according to histological type and death rates per million living, 1960, England and Wales

	All ages	0–	15–	35–	45–	55–	65 and over
	Number of deaths						
All malignant neo-plasms (140–205) M	52,779	459	859	1,639	6,382	14,800	28,640
All malignant neo-plasms (140–205) F	46,009	363	740	2,189	6,203	9,892	26,622
Carcinoma M	46,105	27	325	1,061	5,334	13,144	26,214
Carcinoma F	40,429	28	387	1,789	5,390	8,650	24,185
Glioma M	920	76	66	123	261	284	110
Glioma F	648	53	51	78	159	205	102
Sarcoma M	929	75	134	94	139	214	273
Sarcoma F	1,079	86	89	101	170	216	417
Reticuloses M	3,020	268	315	305	444	654	1,034
Reticuloses F	2,462	184	192	151	299	533	1,103
Undefined M	1,805	13	19	56	204	504	1,009
Undefined F	1,391	12	21	70	185	288	815
	Death rates per million persons living						
All malignant neo-plasms (140–205) ..	2,159	78	136	611	1,942	4,640	10,125
Carcinoma ..	1,891	5	61	455	1,655	4,095	9,234
Glioma	34	12	10	32	65	92	39
Sarcoma	44	15	19	31	48	81	126
Reticuloses ..	120	43	43	73	115	223	392
Undefined.. ..	70	2	3	20	60	149	334

Table LXXVIII. Cancer (ICD Nos. 140–205): Sex and age specific death rates per million living from cancer at various sites and the percentage of mortality at each site to " all sites ", 1960, England and Wales

Males

ICD No.	Site or organ	All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over	Per cent of all sites
140 141 142 143 144	Lip .. Tongue Salivary gland Floor of mouth Other parts of mouth and mouth unspecified	32	1	—	0	2	2	18	48	146	403	660	1·3
145 146 147 148	Oral mesopharynx Nasopharynx Hypopharynx Pharynx unspecified	19	1	0	2	1	2	15	40	96	185	149	0·8
150	Oesophagus	59	—	—	0	2	6	36	113	299	653	777	2·5
151	Stomach	356	—	0	2	11	63	283	873	1,845	2,898	2,543	14·9
152 153	Small intestine, including duodenum Large intestine, except rectum	169	—	—	2	12	35	114	330	804	1,790	2,207	7·1
154	Rectum	137	—	—	1	5	21	86	253	718	1,448	1,872	5·7
155	Biliary passages and liver (stated to be primary site) ..	26	2	1	0	2	6	20	73	120	193	149	1·1
157	Pancreas	94	1	0	—	1	18	70	229	485	770	957	3·9
161	Larynx	31	—	—	—	1	3	22	71	166	285	298	1·3
162 163	Bronchus and trachea, and of lung specified as primary Lung, unspecified as to whether primary or secondary	856	—	—	2	28	158	898	2,879	4,316	3,564	1,862	35·8
170	Breast	3	—	—	—	0	0	2	5	16	25	53	0·1
177	Prostate	166	—	1	0	—	1	15	160	912	2,589	4,011	6·9
178	Testis	10	—	—	8	25	13	9	13	12	12	11	0·4
179	Other and unspecified male genital organs	5	—	—	0	0	2	5	6	23	54	74	0·2
180	Kidney	32	10	2	—	4	8	37	88	146	169	64	1·3
181	Bladder and other urinary organs	97	2	0	0	—	8	47	195	552	993	1,149	4·1

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Table LXXVIII—*continued*

Males

ICD No.	Site or organ	All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over	Per cent of all sites
190 191	Skin (malignant melanoma) Skin (malignant neoplasm)	20	—	0	2	6	10	19	37	59	181	457	0·8
193	Malignant neoplasm of brain and other parts of nervous system	50	19	20	9	18	45	95	137	86	29	11	2·1
194	Thyroid gland	5	—	—	1	0	1	5	13	15	42	32	0·2
195	Other endocrine glands	2	3	0	0	1	1	2	7	8	3	—	0·1
196 197	Bone (including jaw bone) Connective tissue	20	1	5	12	9	8	16	37	71	128	149	0·8
158 164 198	Peritoneum Mediastinum Secondary and unspecified malignant neoplasm of lymph nodes	9	1	1	1	2	4	7	25	40	39	74	0·4
200	Lymphosarcoma and reticulosarcoma	27	5	8	6	10	16	28	65	95	112	64	1·1
201	Hodgkin's disease	23	2	3	17	23	29	31	41	44	44	11	1·0
202	Other forms of lymphoma (reticulosis)	4	2	0	2	1	3	6	7	13	17	32	0·2
203	Multiple myeloma (plasmocytoma)	15	—	—	—	1	7	20	47	66	62	43	0·6
204	Leukaemia and aleukaemia	67	45	36	25	22	44	55	104	229	349	340	2·8
205	Mycosis fungoides	1	—	—	—	—	0	0	3	6	5	—	0·0
Others in 140–205	Remaining sites	58	2	2	4	4	15	48	140	276	438	500	2·4
140–205	Total	2,391	96	80	99	194	531	2,008	6,038	11,663	17,478	18,543	100
193 223 237	Malignant neoplasm of brain and other parts of nervous system Benign neoplasm of brain and other parts of nervous system Neoplasm of unspecified nature of brain and other parts of nervous system	65	26	21	14	22	58	118	178	122	49	32	

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Table LXXIX. Cancer (ICD Nos. 140–205): Sex and age specific death rates per million living from cancer at various sites and the percentage of mortality at each site to " all sites ", 1960, England and Wales

Females

ICD No.	Site or organ	All ages	0-	5-	15-	25-	35-	45-	55-	65-	75-	85 and over	Per cent of all sites
140 141 142 143 144	Lip .. Tongue .. Salivary gland .. Floor of mouth .. Other parts of mouth and mouth unspecified ..	14	—	—	0	1	3	8	19	40	104	202	0·7
145 146 147 148	Oral mesopharynx Nasopharynx Hypopharynx Pharynx unspecified	14	—	—	—	1	7	19	31	46	48	69	0·7
150	Oesophagus ..	43	—	—	0	1	7	28	60	144	306	453	2·2
151	Stomach ..	258	—	—	1	11	37	125	347	949	1,890	2,729	13·3
152 153	Small intestine, including duodenum .. Large intestine, except rectum ..	236	—	0	1	12	42	148	344	783	1,642	2,700	12·1
154	Rectum	103	—	—	0	3	17	68	147	375	696	1,030	5·3
155	Biliary passages and liver (stated to be primary site) ..	37	3	—	0	3	5	19	63	152	224	261	1·9
157	Pancreas	79	—	—	—	1	12	42	115	308	540	739	4·1
161	Larynx	7	—	—	—	—	3	7	14	22	33	30	0·4
162 163	Bronchus and trachea, and of lung specified as primary; Lung, unspecified as to whether primary or secondary	132	—	0	1	8	52	146	300	456	517	399	6·8
170	Breast	382	—	—	2	33	194	569	774	1,051	1,498	2,217	19·7
171	Cervix uteri ..	110	—	—	0	21	109	183	192	279	354	379	5·7
172	Corpus uteri ..	53	—	—	—	2	7	39	133	187	237	300	2·7
173 174	Other parts of uterus, including chorionepithelioma .. Uterus, unspecified	10	—	0	1	4	3	9	23	33	43	49	0·5
175	Ovary, Fallopian tube and broad ligament ..	125	1	2	4	15	62	188	319	341	374	261	6·4
176	Other and unspecified female genital organs ..	23	—	—	1	0	4	13	27	76	186	241	1·2

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Table LXXIX—*continued*

Females

ICD No.	Site or organ	All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over	Per cent of all sites
180	Kidney	22	10	4	2	1	8	17	37	72	113	108	1·1
181	Bladder and other urinary organs	39	1	—	—	0	4	18	53	137	322	365	2·0
190 191	Skin (malignant melanoma) Skin (malignant neoplasm)	19	1	0	1	5	14	17	22	51	103	296	1·0
193	Malignant neoplasm of brain and other parts of nervous system	33	23	12	7	14	30	56	84	50	18	15	1·7
194	Thyroid gland	12	—	—	—	2	2	8	18	45	72	59	0·6
195	Other endocrine glands	2	2	1	1	1	1	2	2	4	4	5	0·1
196 197	Bone (including jaw bone) Connective tissue	15	1	7	9	6	5	11	22	39	64	79	0·8
158 164 198	Peritoneum Mediastinum Secondary and unspecified malignant neoplasm of lymph nodes	11	2	0	0	0	3	8	19	47	46	74	0·6
200	Lymphosarcoma and reticulosarcoma	19	3	4	4	4	9	17	32	66	75	69	1·0
201	Hodgkin's disease	15	1	3	8	14	13	15	24	34	43	20	0·8
202	Other forms of lymphoma (reticulosis)	3	3	—	—	—	2	4	6	11	13	15	0·2
203	Multiple myeloma (plasmocytoma)	15	—	—	0	0	3	13	41	58	48	30	0·8
204	Leukaemia and aleukaemia	51	41	24	16	18	21	41	81	138	190	202	2·6
205	Mycosis fungoides	0	—	—	—	—	0	—	1	2	—	—	0·0
Others in 140–205	Remaining sites	61	4	1	2	9	14	41	98	209	372	507	3·1
140–205	**Total**	1,943	95	59	62	191	689	1,879	3,445	6,203	10,174	13,901	100
193 223 237	Malignant neoplasm of brain and other parts of nervous system Benign neoplasm of brain and other parts of nervous system Neoplasm of unspecified nature of brain and other parts of nervous system	48	27	17	11	20	39	78	119	84	42	25	

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Table LXXX. Cancer: Standardised Mortality Ratios by sex for selected sites, in standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1960, England and Wales

	All sites (140–205)		Buccal cavity and pharynx (140–148)		Oesophagus (150)		Stomach (151)		Intestine and rectum (152–154)		Larynx (161)		Trachea, bronchus and lung (162, 163)	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
ENGLAND AND WALES	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Regions:														
Northern	102	106	94	118	84	114	125	140	105	110	120	112	99	96
East and West Ridings	100	98	112	106	82	88	103	107	109	101	104	93	94	88
North Western	104	104	112	122	116	107	117	128	103	110	101	146	106	51
North Midland	91	99	82	94	92	67	85	90	103	101	95	113	88	88
Midland	98	98	96	89	98	93	102	97	102	101	94	70	98	81
Eastern	88	93	91	86	110	96	78	77	85	94	78	56	87	84
London and South Eastern	109	102	94	91	94	99	92	86	97	97	104	102	119	128
Southern	97	92	99	72	94	88	79	83	108	95	117	51	96	95
South Western	94	95	124	100	122	111	101	85	94	94	84	79	82	76
Wales (including Monmouthshire)	94	104	96	138	109	150	126	139	99	100	102	152	80	67
Conurbations:														
Tyneside	116	107	88	100	115	99	133	128	111	116	141	38	128	130
West Yorkshire	101	99	105	142	98	113	104	112	108	97	94	113	95	78
South East Lancashire	111	109	153	108	107	113	122	128	113	116	99	131	113	120
Merseyside	114	104	102	126	133	114	123	129	101	107	108	139	127	133
West Midlands	106	98	87	81	96	73	108	101	98	109	121	114	116	92
Greater London	114	105	95	94	96	96	98	92	99	97	112	75	128	140
Urban and rural aggregates:														
Conurbations	111	104	104	102	101	99	107	104	102	103	111	95	121	124
Areas outside conurbations:														
Urban areas with populations of 100,000 and over	110	104	110	119	111	103	114	105	110	105	119	90	112	105
Urban areas with populations of 50,000 and under 100,000	102	99	122	114	97	78	97	95	99	99	107	151	103	95
Urban areas with populations under 50,000	93	97	91	100	101	110	96	101	98	99	102	87	87	79
Rural districts	82	94	91	77	92	97	87	89	93	92	67	110	70	79

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Table LXXX—continued

	Breast (170)		Cervix uteri (171)	Other parts of uterus (172-174)	Prostate (177)	Bladder (181·0, ·8)		Bone (including jaw bone) (196)		Lymphosarcoma, reticulosarcoma (200)		Hodgkin's disease (201)		Leukaemia and aleukaemia (204)	
	M	F	F	F	M	M	F	M	F	M	F	M	F	M	F
ENGLAND AND WALES	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Regions:															
Northern	69	79	119	80	87	90	107	68	151	92	100	92	163	106	100
East and West Ridings	88	90	116	93	105	99	86	105	97	87	57	114	53	96	98
North Western	92	87	112	97	93	94	107	131	85	76	65	110	107	94	93
North Midland	80	84	112	115	96	102	104	93	105	105	102	94	101	90	108
Midland	118	100	96	94	94	91	87	139	112	96	93	85	141	96	82
Eastern	75	86	89	103	99	88	127	54	103	102	114	97	64	100	106
London and South Eastern	151	98	90	103	112	119	115	90	79	127	126	109	93	107	110
Southern	102	96	85	93	103	94	68	94	120	94	118	74	103	104	94
South Western	95	96	92	95	103	93	82	114	104	93	109	106	88	109	99
Wales (including Monmouthshire)	—	97	105	127	86	91	66	98	121	90	93	83	107	90	91
Conurbations:															
Tyneside	182	80	130	88	110	100	110	50	91	75	91	75	191	90	118
West Yorkshire	43	90	122	99	107	111	80	130	122	68	79	138	58	101	98
South East Lancashire	160	91	114	120	97	93	115	142	141	56	50	106	115	81	100
Merseyside	63	78	108	78	103	104	110	132	68	93	102	133	68	100	111
West Midlands	108	97	95	92	105	106	91	178	110	89	102	55	130	86	74
Greater London	159	100	91	98	105	119	125	92	79	132	132	108	78	111	111
Urban and rural aggregates:															
Conurbations	134	95	101	99	104	111	113	115	96	103	106	104	93	101	104
Areas outside conurbations:															
Urban areas with populations of 100,000 and over	128	90	118	107	104	103	100	114	68	107	78	115	82	101	102
Urban areas with populations of 50,000 and under 100,000	104	98	93	96	106	109	93	97	103	71	81	124	118	107	99
Urban areas with populations under 50,000	100	91	101	100	101	100	93	83	98	104	102	83	104	100	86
Rural districts	29	88	88	99	89	78	87	87	130	97	108	94	114	96	109

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Table LXXXI. Cancer: Death rates per million living, by sex and certain ages, and Standardised Mortality Ratios (All ages) by sex, for selected sites, 1951 to 1960, England and Wales

All sites (140–205)

					MALES													FEMALES						
All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950–52 = 100)	Year	All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950–52 = 100)
2,120	109	74	92	178	591	2,057	5,414	10,638	16,280	17,627	101	1951	1,822	102	49	66	191	708	1,820	3,616	6,499	10,795	13,886	99
2,152	130	70	102	182	568	2,073	5,562	10,540	16,495	17,031	101	1952	1,848	103	56	66	170	709	1,836	3,680	6,424	10,683	13,169	99
2,166	102	68	104	182	575	2,077	5,616	10,604	16,419	17,279	102	1953	1,833	105	55	59	202	702	1,818	3,574	6,250	10,536	13,197	98
2,123	106	64	105	173	587	2,087	5,720	10,914	16,590	17,730	103	1954	1,861	80	52	72	197	711	1,871	3,556	6,305	10,350	13,509	98
2,232	105	68	99	189	548	2,061	5,803	11,008	17,026	17,308	104	1955	1,873	102	50	63	202	681	1,860	3,550	6,306	10,272	13,551	98
2,274	109	75	101	178	561	2,019	5,885	11,102	16,962	18,038	105	1956	1,891	100	61	71	201	697	1,809	3,559	6,250	10,350	13,682	97
2,312	106	64	109	185	534	2,035	5,950	11,231	17,111	17,849	106	1957	1,890	83	47	57	178	693	1,813	3,551	6,113	10,284	13,277	96
2,333	116	80	90	184	520	2,047	5,869	11,504	17,230	17,761	106	1958	1,929	87	52	57	191	701	1,865	3,521	6,240	10,294	13,862	97
2,366	100	67	98	185	550	2,020	5,983	11,624	17,457	17,889	107	1959	1,929	90	63	69	199	697	1,841	3,487	6,113	10,336	14,016	97
2,391	96	80	99	194	531	2,008	6,038	11,663	17,478	18,543	108	1960	1,943	95	59	62	191	689	1,879	3,445	6,203	10,174	13,901	97

Kidney (180)

					MALES													FEMALES						
All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950–52 = 100)	Year	All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950–52 = 100)
28	12	4	1	2	12	39	88	113	129	—	98	1951	19	15	4	1	2	6	14	40	71	87	86	102
30	15	3	1	2	13	36	81	134	153	77	104	1952	21	18	3	—	2	6	16	42	72	106	108	110
31	5	3	1	2	11	40	89	133	159	147	106	1953	19	10	3	1	2	6	15	42	70	95	79	103
32	13	1	1	3	6	40	104	144	138	41	108	1954	20	9	4	0	2	6	15	33	75	106	130	104
33	12	3	0	4	10	43	91	141	164	141	112	1955	18	13	4	1	2	5	13	40	61	90	48	95
33	12	4	1	3	12	36	92	137	180	125	110	1956	20	14	4	1	3	5	14	38	72	91	121	103
33	11	2	1	2	8	41	96	141	156	81	109	1957	19	5	3	0	3	3	10	42	67	97	92	95
35	14	2	2	2	11	40	89	161	194	148	117	1958	22	15	3	2	1	6	19	35	68	112	154	109
32	5	1	1	3	11	39	93	131	192	44	107	1959	20	9	3	0	1	8	15	30	76	91	109	98
32	10	2	—	4	8	37	88	146	169	64	106	1960	22	10	4	2	1	8	17	37	72	113	108	109

Brain and other parts of nervous system (193)

					MALES													FEMALES						
All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950–52 = 100)	Year	All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950–52 = 100)
35	24	10	9	17	37	65	95	47	20	—	99	1951	22	12	7	10	13	25	39	46	26	12	8	96
39	22	13	11	17	42	76	117	46	11	15	111	1952	23	16	12	6	8	24	40	55	31	10	14	102
38	16	13	12	17	39	74	104	57	20	29	107	1953	26	18	14	7	17	25	45	56	30	11	7	114
39	13	11	12	16	40	76	118	56	25	—	109	1954	27	17	13	9	18	24	47	62	36	11	12	120
42	24	16	9	19	35	83	118	65	23	13	117	1955	27	19	11	9	14	26	44	61	40	10	—	117
41	22	17	11	17	39	74	111	75	19	—	114	1956	28	18	10	8	15	29	47	67	42	20	—	125
41	15	10	13	19	39	77	118	68	19	12	114	1957	29	9	14	8	11	27	50	76	44	14	11	126
50	28	21	20	20	41	90	139	82	22	23	136	1958	34	14	15	11	14	29	55	90	56	14	—	149
48	24	15	12	20	42	99	119	82	19	—	131	1959	35	23	15	11	18	33	55	78	58	19	16	153
50	19	20	9	18	45	95	137	86	29	11	136	1960	33	23	12	7	14	30	56	84	50	18	15	146

Table LXXXI—continued

MALES

Bone (including jaw bone) (196)

Year	All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950–52 = 100)
1951	21	2	5	13	5	9	17	43	94	133	*180*	104
1952	19	4	5	13	7	5	17	32	80	117	*108*	91
1953	19	—	5	13	5	8	14	45	70	109	*132*	90
1954	17	1	4	11	4	6	13	29	75	112	*122*	81
1955	16	1	6	9	4	6	9	32	67	122	*115*	78
1956	18	1	7	14	6	9	15	32	66	98	*100*	86
1957	16	1	3	12	5	6	12	34	54	114	*163*	77
1958	16	3	5	11	6	4	13	32	62	102	*136*	77
1959	15	—	4	12	4	5	12	28	61	92	*111*	71
1960	15	—	4	11	7	6	11	28	55	92	*117*	72

Leukaemia and aleukaemia (204)

Year	All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950–52 = 100)
1951	47	46	31	22	24	29	41	81	152	138	*68*	96
1952	52	60	30	24	21	29	44	96	166	189	*108*	107
1953	53	54	30	24	16	36	47	108	148	207	*118*	108
1954	54	52	28	24	21	36	48	97	180	184	*162*	110
1955	57	38	26	25	21	34	55	106	206	244	*90*	117
1956	57	47	29	29	23	33	49	95	179	285	*250*	116
1957	60	46	28	27	24	31	47	110	194	318	*267*	122
1958	60	46	35	22	24	33	48	114	193	262	*205*	121
1959	60	49	34	24	21	40	41	105	191	314	*200*	121
1960	67	45	36	25	22	44	55	104	229	349	*340*	134

FEMALES

Bone (including jaw bone) (196)

Year	All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950–52 = 100)
1951	14	1	3	7	6	6	11	24	39	74	*71*	98
1952	14	3	4	10	5	6	13	23	46	59	*47*	100
1953	13	2	5	7	4	4	8	23	39	77	*33*	91
1954	14	2	5	7	2	4	8	25	52	55	*87*	95
1955	12	2	4	4	4	4	8	20	36	51	*90*	79
1956	13	3	5	9	4	6	8	19	38	68	*58*	89
1957	12	2	4	6	2	3	9	17	39	68	*87*	83
1958	13	3	6	10	5	5	7	15	36	57	*101*	86
1959	11	1	6	9	3	3	7	14	26	62	*83*	75
1960	11	1	5	7	4	3	8	16	30	47	*60*	71

Leukaemia and aleukaemia (204)

Year	All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950–52 = 100)
1951	41	47	21	15	18	28	42	70	104	101	*38*	104
1952	41	42	21	17	13	25	38	69	101	140	*61*	103
1953	44	48	21	13	15	32	39	69	130	113	*59*	109
1954	44	36	21	20	15	27	38	74	125	132	*112*	110
1955	43	51	23	16	18	26	42	62	110	131	*120*	107
1956	47	41	29	19	22	21	36	77	125	151	*92*	115
1957	47	41	20	12	18	31	43	70	117	172	*120*	115
1958	46	37	30	11	16	25	41	66	124	191	*160*	113
1959	52	39	30	19	20	28	46	77	128	183	*145*	125
1960	51	41	24	16	18	21	41	81	138	190	*202*	124

MALES

Lip, tongue, rest of mouth (140–144)

Year	All ages	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950–52 = 100)
1951	49	1	4	15	75	275	720	881	103
1952	44	1	3	18	75	234	622	631	91
1953	42	2	3	13	67	217	620	691	87
1954	44	2	3	18	65	222	613	878	90
1955	42	1	4	11	68	210	605	718	85
1956	37	1	1	12	50	190	541	788	75
1957	35	1	3	9	54	178	468	698	69
1958	37	2	1	16	52	168	517	784	73
1959	35	1	5	14	43	176	486	656	69
1960	32	2	2	18	48	146	403	660	63

FEMALES

Lip, tongue, rest of mouth (140–144)

Year	All ages	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950–52 = 100)
1951	15	2	3	8	23	57	107	235	104
1952	14	1	3	9	23	56	100	128	97
1953	12	1	4	7	22	43	100	138	86
1954	13	0	3	9	17	48	100	161	91
1955	14	—	—	12	21	35	123	174	94
1956	15	1	4	10	25	50	94	185	97
1957	14	1	3	7	21	42	105	185	91
1958	14	1	1	8	19	45	111	191	91
1959	13	1	1	10	21	38	102	130	85
1960	14	1	3	8	19	40	104	202	89

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Pharynx (145-148)

									Year									
95	83	54	41	30	20	6	1	13	1951	101	288	284	133	52	15	6	1	25
104	47	62	48	35	17	8	2	14	1952	102	338	270	142	50	16	5	0	26
89	66	51	39	28	18	6	1	12	1953	95	338	232	140	42	17	6	1	24
104	62	55	49	28	21	8	2	15	1954	106	338	277	141	59	15	6	1	27
100	84	57	43	30	20	6	3	14	1955	97	308	254	124	59	11	5	2	25
95	87	47	46	31	16	6	2	14	1956	79	262	192	109	47	10	5	1	20
103	71	61	54	33	15	6	3	15	1957	90	337	211	135	41	15	4	1	24
96	53	51	36	33	20	7	3	13	1958	83	205	240	96	49	13	5	1	22
87	73	46	41	28	13	7	1	13	1959	85	256	214	108	47	17	4	1	22
96	69	48	46	31	19	7	2	14	1960	73	149	185	96	40	15	2	1	19

Oesophagus (150)

									Year									
100	318	279	164	71	20	6	2	37	1951	100	814	768	400	157	41	8	3	71
98	338	262	160	63	22	10	1	37	1952	98	862	843	370	148	39	7	0	70
88	414	283	143	65	26	4	2	38	1953	88	735	729	352	127	34	9	2	63
85	404	314	149	68	25	6	1	40	1954	85	811	683	330	123	37	8	1	61
88	365	334	161	57	24	10	2	41	1955	88	679	737	337	126	36	9	2	63
88	387	307	152	67	26	6	2	41	1956	88	775	696	329	141	37	10	1	64
82	375	315	152	61	27	5	0	41	1957	82	709	646	322	119	39	8	1	61
81	441	321	159	62	20	5	1	42	1958	81	557	599	345	123	34	6	2	60
85	409	302	141	64	21	5	1	41	1959	85	856	643	331	127	37	8	1	63
79	453	306	144	60	28	7	1	43	1960	79	777	653	299	113	36	6	2	59

Stomach (151)

									Year									
101	2,667	2,392	1,220	448	160	54	12	286	1951	101	2,746	3,064	2,110	1,015	354	90	14	387
99	2,486	2,181	1,158	443	165	52	10	278	1952	99	2,523	3,079	2,009	978	378	80	14	382
98	2,566	2,211	1,069	412	157	51	14	271	1953	98	2,868	2,927	2,044	978	343	89	17	379
95	2,366	2,115	1,074	433	161	43	13	273	1954	95	2,581	2,979	1,981	919	318	88	12	369
95	2,605	2,080	1,058	395	146	42	11	268	1955	95	2,859	3,169	1,954	905	331	71	12	373
91	2,503	2,126	1,008	394	139	45	11	268	1956	91	2,712	2,938	1,907	909	293	76	10	360
93	2,380	1,967	977	392	119	42	11	258	1957	93	2,930	3,095	1,893	901	311	64	16	369
92	2,495	2,032	1,001	362	128	41	12	264	1958	92	2,830	2,954	1,926	885	303	69	10	365
91	2,668	2,019	951	355	126	37	0	262	1959	91	2,744	2,986	1,925	863	294	65	11	362
88	2,729	1,890	949	347	125	37	11	258	1960	88	2,543	2,898	1,845	873	283	63	11	356

Large intestine, except rectum (153)

									Year									
101	2,914	2,029	907	369	150	51	13	239	1951	101	2,508	2,326	1,127	363	124	44	13	202
97	3,142	2,073	898	396	149	44	11	248	1952	97	2,692	2,281	1,065	353	117	44	13	197
97	3,250	1,919	888	381	143	48	11	243	1953	97	2,956	2,267	1,025	354	127	38	13	196
93	2,776	1,875	832	373	149	56	12	238	1954	93	2,784	2,187	975	354	111	43	7	190
89	2,904	1,869	849	359	143	47	13	240	1955	89	2,487	2,066	932	346	112	38	12	183
86	2,763	1,829	797	366	139	46	11	236	1956	86	2,413	1,969	918	333	107	32	11	177
84	2,777	1,773	786	351	134	40	7	233	1957	84	2,477	1,998	869	316	106	38	12	176
81	2,899	1,745	767	335	137	40	10	232	1958	81	2,477	1,871	862	306	103	37	8	170
79	2,751	1,745	777	344	142	41	7	236	1959	79	2,122	1,829	814	309	103	32	11	165
78	2,695	1,613	760	334	143	40	11	230	1960	78	2,181	1,758	781	316	108	33	11	164

Table LXXXI—*continued*

Rectum (154)

	MALES										FEMALES								
	All ages	25–	35–	45–	5 –	6 –	75–	85 and over	S.M.R. (1950-52 =100)	Year	All ages	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950-52 =100)
	172	6	35	101	354	981	1,834	2,085	102	1951	106	6	27	74	193	434	770	917	99
	162	6	26	97	326	889	1,796	2,031	95	1952	105	4	27	74	193	390	781	912	96
	153	5	24	88	306	852	1,708	1,838	90	1953	106	9	26	84	197	378	758	875	96
	157	6	27	95	288	854	1,737	2,108	91	1954	108	7	28	74	184	381	776	1,099	96
	149	7	22	95	311	760	1,664	1,615	86	1955	104	7	20	69	183	378	708	1,078	91
	147	4	21	77	281	794	1,679	1,938	84	1956	103	5	27	74	163	382	670	1,081	90
	144	7	20	83	274	773	1,575	1,663	82	1957	98	4	21	65	152	357	666	1,043	84
	144	4	23	91	291	735	1,565	1,568	82	1958	107	4	21	69	171	367	731	1,197	91
	140	5	23	83	272	729	1,492	1,789	79	1959	111	6	23	68	166	368	806	1,145	93
	137	5	21	86	253	718	1,448	1,872	77	1960	103	3	17	68	147	375	696	1,030	86

Pancreas (157)

	MALES										FEMALES								
	All ages	25–	35–	45–	5 –	6 –	75–	85 and over	S.M.R. (1950-52 =100)	Year	All ages	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950-52 =100)
	77	3	20	63	211	389	656	678	100	1951	60	1	6	42	110	272	415	576	94
	82	3	17	67	215	441	674	646	105	1952	68	1	9	40	126	285	506	642	105
	81	3	20	73	197	438	649	794	104	1953	65	2	11	41	116	265	486	474	99
	83	3	20	71	204	448	667	784	105	1954	67	1	10	40	111	275	462	689	100
	86	2	19	69	216	441	718	795	108	1955	71	2	9	45	121	294	465	623	105
	86	2	16	74	223	442	712	538	107	1956	67	2	10	32	126	276	442	549	98
	87	3	15	76	218	471	656	709	108	1957	74	1	15	43	129	275	510	603	107
	91	3	16	75	214	472	762	886	113	1958	75	2	9	40	122	305	476	718	107
	95	0	17	71	238	500	762	933	117	1959	79	2	10	42	141	289	534	658	111
	94	1	18	70	229	485	770	957	115	1960	79	1	12	42	115	308	540	739	111

Trachea, bronchus and lung (162, 163)

	MALES										FEMALES								
	All ages	25–	35–	45–	5 –	6 –	75–	85 and over	S.M.R. (1950-52 =100)	Year	All ages	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950-52 =100)
	530	22	175	850	1,952	2,359	1,448	729	101	1951	91	11	39	100	221	352	396	288	99
	568	25	179	843	2,142	2,514	1,623	1,046	107	1952	98	7	40	107	253	344	438	324	105
	607	27	173	881	2,245	2,768	1,913	868	114	1953	98	11	42	107	235	361	435	263	104
	657	25	181	934	2,410	3,040	2,018	838	122	1954	102	11	41	122	235	379	388	373	107
	693	24	175	895	2,539	3,310	2,280	1,000	128	1955	106	10	39	120	261	390	416	275	111
	726	25	172	918	2,625	3,473	2,473	1,288	133	1956	111	10	40	122	267	393	445	428	115
	759	20	169	915	2,724	3,658	2,655	1,384	138	1957	116	9	40	133	280	390	476	364	118
	784	23	166	916	2,684	3,923	2,969	1,182	142	1958	119	11	48	135	278	401	468	404	121
	831	24	182	912	2,849	4,171	3,211	1,378	149	1959	123	10	46	147	287	411	467	368	124
	856	28	158	898	2,879	4,316	3,564	1,862	153	1960	132	8	52	146	300	456	517	399	132

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Breast (170)

FEMALES
Cervix uteri (171)

FEMALES
Corpus uteri (172)

MALES
Prostate (177)

FEMALES
Ovary, Fallopian tube, and broad ligament (175)

Bladder (181·0, ·8)

Table LXXXI—continued

MALES

Other urinary organs (181·7)

Year	All ages	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950–52 = 100)
1951	1	—	—	0	2	2	6	—	141
1952	0	—	1	1	1	1	4	—	99
1953	0	0	—	1	1	2	4	—	98
1954	1	—	—	1	2	4	9	—	175
1955	1	—	—	0	2	3	3	—	115
1956	1	—	—	1	2	4	2	—	123
1957	1	—	0	2	1	3	12	—	186
1958	1	—	—	0	3	1	3	—	111
1959	1	—	—	0	1	6	12	11	174
1960	1	—	—	1	2	3	7	—	135

Hodgkin's disease (201)

Year	All ages	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950–52 = 100)
1951	22	21	24	35	38	51	31	34	104
1952	23	26	23	32	45	49	36	46	106
1953	23	23	27	30	41	55	32	—	106
1954	23	24	29	30	39	51	39	27	107
1955	23	28	26	29	40	49	44	13	106
1956	24	26	28	23	49	56	47	12	108
1957	27	28	32	37	48	50	54	47	124
1958	25	25	21	29	38	45	56	34	100
1959	25	30	25	38	42	51	56	11	114
1960	23	23	29	31	41	44	44	11	106

FEMALES

Other urinary organs (181·7)

Year	All ages	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950–52 = 100)
1951	1	—	—	0	2	3	8	—	92
1952	1	—	1	1	2	3	5	—	86
1953	1	—	—	2	0	6	7	—	113
1954	1	0	0	0	3	5	3	12	111
1955	1	—	—	—	2	3	6	—	77
1956	1	—	1	—	2	5	10	12	130
1957	1	—	—	1	3	4	7	5	118
1958	1	—	—	1	1	3	7	5	61
1959	1	—	—	0	2	5	2	5	94
1960	1	—	0	1	3	1	3	10	88

Hodgkin's disease (201)

Year	All ages	25–	35–	45–	55–	65–	75–	85 and over	S.M.R. (1950–52 = 100)
1951	12	15	14	12	20	24	24	30	103
1952	12	16	10	10	20	28	29	7	103
1953	13	13	12	16	22	24	24	13	106
1954	13	12	11	11	22	32	30	12	105
1955	12	12	12	14	18	30	20	42	104
1956	13	16	13	13	22	27	36	12	112
1957	12	13	11	14	23	26	30	—	104
1958	13	14	12	13	22	32	24	11	113
1959	14	18	15	15	24	28	33	36	118
1960	15	14	13	15	24	34	43	20	125

Table LXXXII. Diseases of the circulatory system, vascular lesions affecting the central nervous system, and congenital malformations of circulatory system: Death rates per million living, and Standardised Mortality Ratios (1950-52 = 100), by sex, 1950 to 1960, England and Wales

Abbreviated List No.	ICD No.		Sex	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
B24	400–402	Rheumatic fever	M	12	8	7	7	7	5	5	4	3	3	3
			F	14	9	8	7	6	5	5	4	3	3	3
B25	410–416	Chronic rheumatic heart disease	M	201	194	164	157	148	140	142	138	118	113	112
			F	306	298	247	240	237	232	223	225	208	195	196
	420	Arteriosclerotic heart disease including coronary disease	M	1,671	1,789	1,874	1,860	2,016	2,097	2,206	2,230	2,395	2,385	2,561
			F	903	956	999	1,012	1,084	1,163	1,222	1,243	1,368	1,393	1,497
B26	421	Chronic endocarditis not specified as rheumatic	M	74	64	74	71	81	75	75	81	77	69	76
			F	56	47	63	60	64	60	59	70	65	65	66
	422	Other myocardial degeneration	M	1,464	1,552	1,303	1,230	1,177	1,179	1,112	976	988	868	809
			F	1,847	1,959	1,629	1,603	1,528	1,550	1,490	1,335	1,382	1,275	1,232
	430	Acute and subacute endocarditis	M	11	10	9	9	9	10	9	9	9	9	8
			F	7	7	6	6	9	5	5	9	6	5	6
B27	431–434	Other diseases of heart	M	161	210	202	216	231	230	235	253	260	249	265
			F	208	231	238	248	250	261	273	286	300	298	310
B28, 29	440–447	Hypertension with or without mention of heart disease	M	461	492	440	451	457	458	444	419	400	362	353
			F	466	494	444	453	472	498	486	464	469	437	423
B46 (part)	450	General arteriosclerosis	M	246	262	229	224	225	225	220	198	221	209	211
			F	237	255	227	233	228	251	242	231	253	261	269
	465	Pulmonary embolism and infarction	M	15	16	15	18	19	22	21	22	22	29	32
			F	15	14	16	19	19	21	25	24	29	31	34
	Rem. of 451–468	Other circulatory diseases	M	52	49	65	68	76	81	89	95	101	104	112
			F	63	56	69	70	79	85	94	93	101	102	115
	400–468	Diseases of the circulatory system	M	4,369	4,645	4,382	4,311	4,446	4,521	4,558	4,425	4,595	4,401	4,542
			F	4,121	4,344	3,946	3,950	3,973	4,131	4,124	3,980	4,183	4,065	4,151
	400–468	Standardised Mortality Ratios	M	98	104	97	95	97	98	99	95	98	94	96
			F	102	105	93	92	90	92	91	86	89	85	86
B22	330–334	Vascular lesions affecting the central nervous system	M	1,284	1,378	1,381	1,356	1,433	1,454	1,442	1,411	1,439	1,412	1,405
			F	1,656	1,732	1,761	1,716	1,811	1,868	1,877	1,854	1,921	1,883	1,909
B41 (part)	754	Congenital malformations of circulatory system	M	55	50	42	43	45	47	47	52	52	50	53
			F	43	42	35	34	33	33	34	39	37	39	43

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Table LXXXIII. Diseases of the circulatory system, vascular lesions affecting the central nervous system, and congenital malformations of circulatory system: Deaths and death rates per million living, and per 100 deaths from all circulatory diseases, by sex and age, 1960, England and Wales

Abbreviated List No.	Cause of death		Males							Females						
			All ages	0–	15–	25–	45–	65–	75 and over	All ages	0–	15–	25–	45–	65–	75 and over
B24	Rheumatic fever	Deaths	61	9	8	4	18	15	7	64	11	8	6	17	18	9
		Rate	2·8	*1·7*	2·7	0·67	3·2	*11*	*10*	2·7	2·2	2·7	0·99	2·8	6·2	7·1
		Per cent	0·1	12·9	6·5	0·2	0·1	0·1	0·0	0·1	18·0	9·9	0·5	0·1	0·1	0·0
B25	Chronic rheumatic heart disease	Deaths	2,469	4	47	394	1,165	517	342	4,652	4	30	594	1,976	1,084	964
		Rate	112	0·75	16	66	207	366	496	196	0·78	10	98	320	521	757
		Per cent	2·5	5·7	38·2	14·8	4·2	1·8	0·8	4·7	6·6	37·0	48·2	16·7	4·5	1·6
B26 {	Arteriosclerotic heart disease	Deaths	56,514	1	8	1,674	20,673	18,466	15,692	35,447	1	4	210	5,699	12,042	17,491
		Rate	2,561	0·19	2·7	279	3,673	13,069	22,742	1,497	0·20	1·4	34	923	5,784	13,740
		Per cent	56·3	1·4	6·5	62·7	74·4	63·2	38·9	36·0	1·6	4·9	17·0	48·3	50·0	28·6
B26 {	Degenerative heart disease	Deaths	19,550	12	13	124	1,487	4,074	13,840	30,747	5	8	66	1,058	4,358	25,252
		Rate	886	2·2	4·4	21	264	2,883	20,058	1,298	0·98	2·7	11	171	2,093	19,837
		Per cent	19·5	17·1	10·6	4·7	5·3	13·9	34·3	31·3	8·2	9·9	5·4	9·0	18·1	41·4
B27	Other diseases of heart	Deaths	6,019	30	29	121	1,190	1,720	2,929	7,316	26	17	103	791	1,823	4,719
		Rate	273	5·6	9·8	20	211	1,217	4,245	316	5·1	5·7	17	128	876	3,707
		Per cent	6·0	43·0	23·6	4·5	4·3	5·9	7·3	7·6	42·7	21·0	8·4	6·7	7·6	7·7
B28	Hypertension with heart disease	Deaths	4,678	1	1	42	1,021	1,579	2,034	6,616	—	—	31	739	1,939	3,907
		Rate	212	0·19	0·34	7·0	181	1,117	2,948	279	—	—	5·1	120	931	3,069
		Per cent	4·7	1·4	0·8	1·6	3·7	5·4	5·0	6·7			2·5	6·3	8·1	6·4
B29	Hypertension without mention of heart	Deaths	3,123	1	7	188	1,040	817	1,070	3,407	1	3	80	608	823	1,392
		Rate	142	0·19	2·4	31	185	578	1,551	144	0·20	1·0	13	99	395	1,486
		Per cent	3·1	1·4	5·7	7·1	3·7	2·8	2·6	3·5	1·6	3·7	6·5	5·2	3·4	3·1
B46 (part)	Other circulatory diseases	Deaths	7,830	12	10	117	1,201	2,018	4,472	9,907	13	11	142	914	1,963	6,864
		Rate	355	2·2	3·4	19	213	1,428	6,481	418	2·5	3·7	23	148	943	5,392
		Per cent	7·8	17·1	8·1	4·4	4·3	6·9	11·1	10·1	21·3	13·6	11·5	7·7	8·2	11·2
	All circulatory diseases	Deaths	100,244	70	123	2,664	27,795	29,206	40,386	98,319	61	81	1,232	11,802	24,045	61,098
		Rate	4,542	13	41	444	4,938	20,669	58,510	4,151	12	27	212	1,912	11,549	47,995
		Per cent	100	100	100	100	100	100	100	100	100	100	100	100	100	100
B22	Vascular lesions affecting central nervous system	Deaths	31,006	50	40	473	6,155	9,484	14,804	45,216	35	37	503	5,936	11,633	27,072
		Rate	1,405	9·3	13	79	1,093	6,712	21,455	1,909	6·9	13	83	962	5,587	21,266
B41 (part)	Congenital malformations of circulatory system	Deaths	1,161	916	62	68	85	22	8	1,009	779	51	64	79	27	9
		Rate	53	171	21	11	15	*16*	*12*	43	152	17	11	13	13	*7·1*

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Table LXXXIV. Diseases of the circulatory system, and vascular lesions affecting the central nervous system: Death rates per million living, by sex, at age 45–64, in the standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1960, England and Wales

	All causes		Vascular lesions affecting central nervous system (330–334)		Chronic rheumatic heart disease and chronic endocarditis (410–416, 421)		Arteriosclerotic heart disease (420)		Myocardial degeneration (422)		Other diseases of heart (430–434)		Hypertension with or without heart disease (440–447)	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
ENGLAND AND WALES	13,370	7,234	1,093	962	308	366	3,673	923	164	126	211	128	366	218
Regions:														
Northern	14,769	8,248	1,241	1,204	310	355	4,218	1,343	159	165	233	131	303	214
East and West Ridings	14,133	7,524	1,139	967	287	443	4,076	1,063	169	126	220	154	355	237
North Western	15,243	8,204	1,283	1,121	358	506	4,332	1,111	195	160	299	184	400	224
North Midland	12,196	7,179	1,065	976	278	319	3,212	834	221	140	230	170	400	220
Midland	13,601	7,347	1,222	961	360	397	3,282	864	190	169	246	142	390	222
Eastern	10,865	6,204	835	897	261	234	2,911	783	149	73	156	84	287	165
London and South Eastern	12,826	6,698	915	789	300	319	3,534	766	93	75	152	87	344	189
Southern	12,215	6,504	1,037	847	243	261	3,296	779	150	122	215	122	318	190
South Western	12,644	6,850	1,128	954	242	276	3,448	863	259	159	184	107	438	283
Wales (including Monmouthshire)	14,617	7,920	1,288	1,219	398	501	4,255	1,046	169	151	220	134	442	313
Conurbations:	14,157	7,271	1,103	890	326	411	3,851	907	123	104	204	123	382	209
Tyneside	15,913	7,956	1,519	1,115	260	301	4,269	1,319	163	97	173	115	308	239
West Yorkshire	15,164	7,711	1,264	1,004	268	423	4,855	1,217	200	119	255	178	405	217
South East Lancashire	15,732	8,278	1,307	1,178	359	496	4,163	1,000	209	215	288	178	464	226
Merseyside	15,865	8,203	1,308	977	353	605	4,423	1,254	64	57	314	192	372	203
West Midlands	14,391	7,108	1,297	902	413	437	3,217	797	214	156	264	129	438	197
Greater London	12,986	6,709	885	742	307	357	3,586	748	60	62	140	83	347	203
Areas outside conurbations:														
Urban areas with populations of 100,000 and over	14,441	7,634	1,146	995	330	435	3,957	987	137	126	239	170	379	242
Urban areas with populations of 50,000 and under 100,000	13,542	7,048	1,106	912	274	312	3,679	935	189	122	281	124	375	208
Urban areas with populations under 50,000	13,137	7,271	1,149	1,061	316	345	3,681	948	217	142	215	131	378	209
Rural districts	11,388	6,915	973	985	262	275	3,139	878	187	153	177	109	310	236

Table LXXXV. Diseases of the circulatory system, and vascular lesions affecting the central nervous system: Death rates per million living, by sex, at age 65 and over, in the standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1960, England and Wales

	All causes		Vascular lesions affecting central nervous system (330–334)		Chronic rheumatic heart disease and chronic endocarditis (410–416, 421)		Arteriosclerotic heart disease (420)		Myocardial degeneration (422)		Other diseases of heart (430–434)		Hypertension with or without heart disease (440–447)	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
ENGLAND AND WALES	79,529	57,922	11,549	11,537	903	985	16,243	8,803	8,024	8,452	2,211	1,950	2,615	2,552
Regions:														
Northern	85,421	63,872	15,110	14,212	614	783	17,338	10,921	9,055	9,000	2,310	2,000	2,269	2,483
East and West Ridings	81,782	60,348	12,888	12,259	883	855	17,154	10,200	7,245	8,331	2,090	1,866	2,404	2,638
North Western	85,671	63,992	12,902	12,894	881	1,036	17,615	9,472	8,654	9,023	2,556	2,284	2,231	2,534
North Midland	76,683	57,273	11,844	11,603	611	736	14,240	7,574	8,886	8,822	2,581	2,326	2,958	2,570
Midland	78,264	57,929	12,021	11,522	824	939	14,477	8,034	8,021	8,990	2,119	2,162	2,725	2,657
Eastern	70,231	52,560	9,835	10,635	742	884	14,956	8,206	6,918	7,267	2,011	1,733	2,132	1,978
London and South Eastern	77,650	54,664	9,505	9,791	1,152	1,202	16,481	8,579	6,543	7,480	2,111	1,823	2,661	2,654
Southern	75,163	53,146	10,585	10,826	874	886	15,704	8,370	8,111	8,018	2,281	1,562	2,881	2,192
South Western	81,023	58,159	11,715	12,131	895	901	16,453	8,141	10,907	10,410	2,064	1,756	2,983	2,541
Wales (including Monmouthshire)	84,600	62,163	12,708	13,742	1,092	1,017	17,031	8,921	8,908	9,247	1,962	2,039	3,285	3,174
Conurbations														
Conurbations	81,526	57,919	11,003	10,672	1,014	1,154	16,854	9,136	6,772	7,577	2,123	1,953	2,639	2,700
Tyneside	90,444	63,585	16,083	13,868	778	925	17,111	10,811	8,583	8,075	1,889	1,849	2,889	2,566
West Yorkshire	85,882	61,185	13,803	12,415	763	892	19,224	11,469	7,237	8,008	2,382	1,831	2,342	2,585
South East Lancashire	85,931	64,891	13,078	12,937	961	1,098	16,314	8,724	9,000	9,960	2,441	2,443	1,922	2,500
Merseyside	88,058	61,500	12,519	11,200	596	878	19,404	9,889	5,750	5,600	2,942	2,511	2,173	2,656
West Midlands	80,079	58,280	12,146	11,608	708	958	14,000	7,923	7,663	9,322	1,888	2,049	3,247	2,979
Greater London	77,734	54,155	8,725	9,090	1,251	1,332	16,818	8,787	5,749	6,651	1,934	1,744	2,803	2,735
Areas outside conurbations:														
Urban areas with populations of 100,000 and over	86,926	60,123	12,767	12,493	996	1,014	17,949	9,524	7,774	8,434	2,416	1,900	2,938	2,640
Urban areas with populations of 50,000 and under 100,000	82,373	58,564	11,882	12,393	789	884	16,944	8,687	9,075	8,618	2,130	2,000	2,398	2,378
Urban areas with populations under 50,000	78,727	58,286	11,852	12,156	856	846	15,963	8,567	8,854	9,383	2,216	1,918	2,628	2,487
Rural districts	72,423	55,787	11,255	11,392	777	864	14,465	8,060	8,760	8,862	2,251	1,994	2,465	2,374

Table LXXXVI. Congenital malformations of the circulatory system (ICD No. 754): Deaths and death rates per million living, by sex and age, 1952 to 1960, England and Wales

Age	1952 M	1952 F	1953 M	1953 F	1954 M	1954 F	1955 M	1955 F	1956 M	1956 F	1957 M	1957 F	1958 M	1958 F	1959 M	1959 F	1960 M	1960 F
Deaths																		
All ages	890	804	913	786	948	767	1,007	756	1,017	791	1,126	911	1,124	870	1,102	921	1,161	1,009
0–	604	491	623	491	647	514	645	430	677	506	725	553	726	528	724	584	747	612
1–	56	68	60	64	48	58	80	76	58	59	71	60	87	71	76	66	83	84
5–	42	51	51	37	50	42	53	55	60	49	68	55	52	53	79	67	86	83
15–	132	111	117	106	122	87	144	115	132	102	140	115	148	117	132	105	130	115
45–	40	56	46	58	60	45	67	58	65	53	94	95	86	79	69	68	85	79
65 and over	16	27	16	30	21	21	18	22	25	22	28	33	25	22	22	31	30	36
Death rates per million living*																		
All ages	42·2	35·2	43·1	34·3	44·5	33·4	47·1	32·8	47·3	34·2	52·0	39·2	51·7	37·2	50·4	39·2	52·6	42·6
0–	1·75	1·50	1·77	1·48	1·87	1·57	1·88	1·33	1·88	1·49	1·95	1·58	1·91	1·47	1·88	1·61	1·85	1·61
1–	38·4	48·9	43·1	48·2	35·3	44·8	59·4	59·2	43·3	46·3	52·6	46·8	63·7	54·7	54·6	49·9	57·7	61·5
5–	13·1	16·5	15·4	11·6	14·8	13·0	15·4	16·7	17·1	14·6	19·2	16·2	14·6	15·6	22·3	19·8	24·3	24·5
15–	14·5	11·8	12·9	11·4	13·6	9·42	16·0	12·5	14·8	11·2	15·7	12·7	16·6	13·0	14·8	11·6	14·5	12·7
45–	8·00	9·76	9·05	10·0	11·6	7·69	12·8	9·81	12·2	8·88	17·4	15·8	15·7	13·0	12·4	11·1	15·1	12·8
65 and over	8·01	9·23	7·98	10·1	10·4	6·93	8·85	7·15	12·2	7·03	13·5	10·3	12·1	6·79	10·6	9·43	14·3	10·7

* At ages under 1 year, per thousand live birth occurrences.

Table LXXXVII. Bronchitis (ICD Nos. 500–502): Infant mortality rates per 1,000 live births, death rates per million living at ages over one year and Standardised Mortality Ratios (1950–52 = 100), 1949 to 1960, England and Wales

	Infant mortality rate	1–	5–	15–	25–	35–	45–	55–	65–	75 and over	S.M.R. (All ages)
	Males										
1949	0·74	29	4·4	10	16	78	492	1,962	4,270	9,534	92
1950	0·79	41	8·0	4·6	13	72	474	1,921	4,296	9,375	91
1951	0·74	46	5·5	5·1	14	93	616	2,479	5,619	12,392	118
1952	0·64	49	8·4	2·6	14	67	476	1,939	4,392	9,163	91
1953	0·70	42	5·7	5·5	11	73	486	2,036	5,007	10,062	99
1954	0·58	43	7·1	5·9	11	67	425	1,780	4,347	8,583	86
1955	0·65	48	5·8	9·5	11	73	475	1,997	4,868	9,531	96
1956	0·54	58	5·4	5·5	11	57	437	2,072	5,040	9,754	98
1957	0·45	39	4·8	4·0	11	65	431	2,034	4,683	8,503	92
1958	0·54	40	7·3	9·3	10	69	434	2,044	5,181	9,506	98
1959	0·57	40	6·2	5·2	12	53	411	1,958	5,126	9,624	96
1960	0·52	44	5·6	4·7	12	58	346	1,823	4,662	9,161	89
	Females										
1949	0·58	28	5·3	7·2	11	36	132	473	1,779	6,673	104
1950	0·57	34	4·5	6·9	10	35	107	431	1,582	6,197	95
1951	0·60	41	4·8	6·3	13	41	142	608	2,102	8,019	124
1952	0·47	37	5·2	8·5	11	29	94	369	1,375	5,241	81
1953	0·55	45	5·0	5·7	13	35	98	433	1,501	5,875	91
1954	0·41	30	6·8	5·3	8·2	24	95	330	1,133	4,358	68
1955	0·41	25	3·6	4·6	11	29	94	366	1,321	4,768	76
1956	0·35	31	4·5	4·0	10	34	89	384	1,293	4,889	77
1957	0·35	34	6·5	5·0	12	30	93	330	1,104	3,547	61
1958	0·40	32	5·3	6·4	11	31	103	390	1,168	4,067	68
1959	0·47	32	3·5	4·5	8·2	30	92	359	1,161	3,883	65
1960	0·40	28	3·3	2·4	7·2	23	85	288	916	3,277	54

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Table LXXXVIII. Bronchitis: Death rates per million living, by sex, at ages 15–44, 45–64, and 65 and over, and Standardised Mortality Ratios, in standard regions and urban and rural aggregates within regional groups, 1960, England and Wales

	15–		45–		65 and over		S.M.R. (Persons all ages)
	M	F	M	F	M	F	
ENGLAND AND WALES	25	11	989	179	6,138	1,812	100
Urban and rural aggregates:							
Conurbations	28	14	1,160	202	7,702	2,360	123
Areas outside conurbations:							
Urban areas with populations of 100,000 and over ..	33	*11*	1,097	187	7,321	1,709	111
Urban areas with populations of 50,000 and under 100,000	31	*10*	970	160	5,926	1,751	95
Urban areas with populations under 50,000	24	*8*	951	181	5,424	1,471	89
Rural districts	15	*9*	646	133	4,004	1,313	69
NORTH OF ENGLAND	35	16	1,336	268	7,166	2,299	127
Regions:							
Northern	28	*12*	1,277	229	6,083	1,882	113
East and West Ridings	41	*15*	1,254	236	7,447	2,138	125
North Western	36	*19*	1,416	305	7,531	2,578	135
Conurbations	42	21	1,524	294	8,267	2,702	144
Tyneside	*30*	*29*	1,548	292	8,306	2,547	148
West Yorkshire	*35*	*6*	1,273	198	7,474	2,185	120
South East Lancashire	*57*	*23*	1,582	364	8,843	2,954	155
Merseyside	*34*	*31*	1,750	294	8,269	3,056	156
Areas outside conurbations:							
Urban areas with populations of 100,000 and over ..	42	*17*	1,467	259	8,735	2,184	142
Urban areas with populations of 50,000 and under 100,000	*53*	*23*	1,220	283	6,364	2,394	120
Urban areas with populations under 50,000	*20*	*5*	1,206	247	6,312	1,920	112
Rural districts	*20*	*11*	836	201	4,379	1,505	83
WALES AND MIDLANDS	30	12	1,037	191	6,506	1,865	108
Regions:							
Wales	*39*	*10*	1,110	185	6,885	1,438	109
North Midland	*25*	*17*	903	168	5,545	1,773	96
Midland	*30*	*9*	1,099	212	7,083	2,195	117
Conurbation:							
West Midlands..	*38*	*10*	1,351	224	8,708	2,629	141
Areas outside conurbation:							
Urban areas with populations of 100,000 and over ..	42	*15*	1,081	214	7,775	1,890	121
Urban areas with populations of 50,000 and under 100,000	*30*	*15*	1,122	*141*	6,710	1,806	113
Urban areas with populations under 50,000	*28*	*13*	1,051	199	6,454	1,661	105
Rural districts	*20*	*9*	722	148	4,387	1,497	78
SOUTH AND EAST OF ENGLAND (excluding Greater London)	17	*5*	655	106	4,412	1,196	67
Regions:							
London and South Eastern (excluding Greater London)	*22*	*9*	676	123	4,358	1,239	66
Southern	*17*	*4*	763	102	4,541	1,224	72
South Western	*18*	*5*	668	87	4,512	1,110	66
Eastern	*12*	*3*	546	114	4,269	1,220	66
Urban areas with populations of 100,000 and over ..	17	*2*	807	106	5,898	1,259	81
Urban areas with populations of 50,000 and under 100,000	*18*	—	736	88	5,367	1,412	76
Urban areas with populations under 50,000	*25*	*6*	694	124	4,223	1,129	65
Rural districts	*10*	*7*	513	94	3,634	1,144	59
GREATER LONDON	14	*10*	833	127	7,009	2,047	102

Table LXXXIX. Accidents and violence: Proportion of deaths attributed to violent causes per 100 deaths from all causes, by sex and age, 1901 to 1960, England and Wales

	Males					Females				
	All ages	0–	15–	35–	65 and over	All ages	0–	15–	35–	65 and over
1901–10	5·05	3·22	12·88	7·22	2·31	2·31	2·85	3·06	2·18	1·54
1911–20	5·69	3·74	15·69	7·16	2·29	2·31	2·95	2·97	2·26	1·63
1921–30	5·48	4·43	15·49	7·06	2·37	2·49	3·06	4·02	2·74	1·79
1931–35	6·05	5·60	20·29	7·37	2·55	3·04	4·11	5·54	3·31	2·25
1936–40	7·30	7·30	29·58	8·67	2·89	4·10	5·73	9·52	4·82	2·83
1941–45	9·13	10·34	46·29	9·46	2·85	4·56	8·25	12·26	5·58	2·74
1946–50	4·81	8·50	26·26	6·01	2·07	2·91	6·53	5·86	3·50	2·16
1951	4·42	10·22	34·74	5·68	1·85	2·73	7·36	8·21	3·42	2·06
1952	4·65	10·28	37·65	5·97	1·91	2·84	7·67	9·46	3·58	2·11
1953	4·75	9·63	38·86	6·18	2·13	3·09	7·43	10·10	4·01	2·35
1954	4·86	9·49	39·22	6·33	2·35	3·40	7·00	12·20	4·14	2·75
1955	4·84	10·44	43·29	6·21	2·24	3·39	7·91	12·81	4·35	2·68
1956	4·85	9·90	43·90	6·36	2·32	3·50	7·70	13·78	4·71	2·76
1957	4·83	9·30	43·18	6·24	2·28	3·50	7·13	13·97	4·62	2·77
1958	4·93	10·07	48·19	6·53	2·22	3·56	7·26	16·44	4·75	2·82
1959	4·99	10·02	49·98	6·22	2·33	3·64	7·38	18·41	4·96	2·84
1960	5·02	9·76	52·42	6·41	2·16	3·74	7·03	21·74	5·39	2·85

Table XC. Accidents and violence: Death rates per million living, by sex and age, 1901 to 1960, England and Wales

	All ages	0–	5–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over
Males												
1901–10	827	1,231	329	262	447	555	677	914	1,257	1,623	1,818	2,621
1911–20	857	934	395	304	596	902	828	894	1,082	1,395	1,715	2,757
1921–30	709	683	375	243	449	584	536	658	917	1,259	1,616	2,842
1931–40	843	735	394	261	561	773	658	716	977	1,375	1,724	3,638
1941–50	778	726	459	319	571	648	582	613	781	1,075	1,413	2,832
1951	591	487	259	190	362	608	474	429	591	814	1,137	2,745
1952	568	473	217	167	415	643	445	436	546	796	1,092	2,450
1953	582	418	215	151	373	603	446	429	583	822	1,198	2,811
1954	593	393	168	161	369	580	426	445	583	846	1,256	3,214
1955	605	386	207	181	444	671	446	444	567	823	1,243	3,166
1956	604	392	173	151	410	608	442	428	578	874	1,259	3,320
1957	594	351	168	156	456	644	421	456	566	845	1,197	3,126
1958	614	361	196	163	481	636	469	483	584	854	1,130	3,268
1959	615	352	185	164	574	704	448	442	560	833	1,261	3,183
1960	612	334	210	160	576	767	460	458	593	820	1,067	3,057
Females												
1901–10	329	1,059	226	81	103	111	135	198	307	423	752	2,287
1911–20	300	767	234	98	117	120	127	179	272	382	728	2,364
1921–30	283	487	182	71	117	127	126	168	268	397	716	2,516
1931–40	412	537	215	108	183	192	199	239	355	523	1,005	3,399
1941–50	407	546	231	135	169	179	187	221	313	446	791	2,808
1951	321	350	96	45	88	87	85	126	228	327	648	2,803
1952	298	330	100	50	77	86	85	120	213	322	604	2,406
1953	329	319	94	62	73	86	88	139	232	349	670	2,727
1954	358	264	86	48	81	90	107	138	239	357	783	3,066
1955	370	300	94	59	94	85	96	143	241	377	775	3,128
1956	383	284	87	52	76	91	101	140	260	412	764	3,242
1957	374	279	83	45	79	98	103	145	258	396	762	2,991
1958	390	255	86	52	91	115	103	148	271	380	792	3,166
1959	399	259	82	67	101	130	113	156	253	416	784	3,163
1960	406	224	95	65	117	131	122	170	282	429	776	3,083

Table XCI. Motor vehicle accidents: Death rates per million living, by sex and age, and Standardised Mortality Ratios by sex, 1931 to 1960, England and Wales

	All ages	0–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over	S.M.R.† (1950–52 = 100)
Males												
1931–35 ..	208	184	93	204	368	210	133	153	206	363	678	143
1936–40 ..	216	159	86	176	363	209	152	171	257	411	749	146
1941–45 ..	199	198	113	152	227	193	149	160	228	353	556	130
1946 ..	153	144	109	161	205	139	109	102	160	241	498	99
1947 ..	146	134	75	127	209	139	106	111	147	246	460	95
1948 ..	126	135	63	122	173	112	79	97	142	194	400	82
1949 ..	140	123	80	147	226	117	103	101	137	229	451	91
1950 ..	151	104	60	177	279	164	106	102	153	242	439	98
1951 ..	161	112	88	178	308	174	112	117	160	231	505	105
1952 ..	149	105	73	165	301	150	123	105	144	219	403	97
1953 ..	158	98	61	170	307	164	110	126	160	245	518	103
1954 ..	161	77	57	194	323	165	116	127	170	259	564	105
1955 ..	171	83	64	234	388	170	125	130	164	273	540	111
1956 ..	174	86	61	236	344	182	121	138	185	270	587	113
1957 ..	170	74	58	254	378	164	130	125	166	263	604	111
1958* ..	186	81	68	305	386	175	140	142	191	271	638	121
1959* ..	202	77	67	384	476	180	137	147	207	319	626	131
1960* ..	215	83	63	411	476	200	151	173	221	301	678	140
Females												
1931–35 ..	68	106	34	49	50	31	29	49	95	181	267	169
1936–40 ..	64	84	30	49	48	29	27	45	85	173	279	158
1941–45 ..	56	106	42	42	40	29	26	37	61	107	172	128
1946 ..	47	72	30	36	27	21	20	27	56	100	185	105
1947 ..	47	71	26	37	23	17	22	33	54	100	177	104
1948 ..	43	79	31	25	16	14	19	21	49	101	157	96
1949 ..	41	65	32	32	30	10	16	22	44	95	151	91
1950 ..	46	64	25	40	30	17	19	35	48	84	200	101
1951 ..	49	58	22	47	37	19	23	35	54	101	198	107
1952 ..	42	52	21	34	31	19	18	28	43	94	168	92
1953 ..	45	56	25	36	37	16	18	33	49	87	181	97
1954 ..	51	45	15	36	37	23	23	32	63	120	218	109
1955 ..	55	52	26	58	45	22	26	32	57	121	235	117
1956 ..	56	47	22	42	40	26	26	38	63	129	236	119
1957 ..	53	42	22	42	46	24	22	37	59	117	222	111
1958* ..	60	43	23	50	49	29	23	43	65	144	254	126
1959* ..	69	48	25	60	67	32	28	48	81	146	289	143
1960* ..	80	46	34	78	62	36	38	61	101	173	306	165

* According to the Seventh Revision of the International Classification (Nos. E810–E835). Other years according to the classification in use at the time.

† S.M.R.s are based on civilian deaths and civilian populations for the years 1940–1949 inclusive.

Table XCII. Motor vehicle accidents: Deaths by sex according to nature of injury and external cause, 1960, England and Wales

Nature of injury (Intermediate List)	Sex	Total deaths in motor vehicle accidents E810–E835	External cause of injury and ICD No. MOTOR VEHICLE TRAFFIC ACCIDENTS — E812 to pedestrian	E813 to pedal cyclist	E814 to rider or passenger of motorcycle in collision with non-motor vehicle or object	E815 to rider or passenger of motorcycle in collision with other motor vehicle	E816 Other motor vehicle traffic accident involving two or more motor vehicles	E821 to rider of motorcycle without antecedent collision	E822 involving overturning in roadway	E823 involving running off roadway	E824 Other non-collision motor vehicle traffic accident	Remainder of E810–E835
Total	M	4,754	1,488	477	65	1,054	659	410	42	349	58	152
	F	1,889	1,174	91	8	99	276	44	13	97	31	56
AN 138 Fracture of skull	M	2,334	691	276	42	574	233	272	16	134	36	60
	F	827	508	54	5	61	95	35	5	30	15	19
AN 139 Fracture of spine and trunk	M	502	235	41	3	67	71	22	6	41	2	14
	F	298	213	8	1	7	40	2	2	18	1	6
AN 140 Fracture of limbs	M	231	118	18	2	43	26	1	—	12	2	9
	F	127	94	1	—	4	11	—	—	4	5	8
AN 141 Dislocation without fracture	M	14	4	3	—	—	1	2	—	3	—	1
	F	4	4	—	—	—	2	—	—	—	—	—
AN 142 Sprains and strains of joints and adjacent muscles	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
AN 143 Head injury (excluding fracture)	M	566	180	69	8	136	62	49	6	33	7	16
	F	229	140	16	2	5	41	1	—	10	6	8
AN 144 Internal injury of chest, abdomen, and pelvis	M	753	162	44	5	161	190	51	9	87	7	37
	F	241	118	6	—	16	62	4	4	19	1	11
AN 145 Laceration and open wounds	M	98	25	7	1	27	19	7	1	7	1	3
	F	36	22	3	—	—	6	—	2	2	—	1
AN 146 Superficial injury, contusion and crushing with intact skin surface	M	11	4	2	—	3	—	—	—	1	—	—
	F	7	6	—	—	—	1	—	—	—	1	—
AN 147 Effects of foreign body entering through orifice	M	1	—	—	—	—	4	1	—	1	—	—
	F	—	—	—	—	—	1	—	—	—	—	1
AN 148 Burns	M	10	—	—	—	—	—	—	—	3	1	—
	F	1	—	—	—	—	—	—	—	1	2	—
AN 149 Effects of poisons	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
AN 150 All other and unspecified effects of external causes	M	234	69	17	4	43	53	5	4	27	2	12
	F	118	72	3	—	6	18	2	—	13	—	2

Table XCIII. Deaths of pedestrians, pedal cyclists, motorcyclists, motor vehicle occupants, and others in motor vehicle traffic accidents, motor vehicle non-traffic accidents, and other road vehicle accidents, by sex, 1941 to 1960, England and Wales

	1941–45 (annual average)		1946–49 (annual average)		1950–54 (annual average)		1955		1956		1957		1958		1959		1960	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Pedestrians:																		
Motor vehicle traffic accidents	2,073	898	1,295	706	1,185	719	1,210	813	1,275	844	1,219	753	1,323	900	1,299	979	1,488	1,174
Motor vehicle non-traffic accidents	165	70	79	47	43	8	52	9	47	9	40	6	37	4	39	4	36	6
Other road vehicle accidents					63	36	43	31	45	29	38	22	25	33	17	26	20	25
Pedal cyclists:																		
Motor vehicle traffic accidents	557	140	464	86	462	77	437	84	458	67	428	68	446	56	524	90	477	91
Motor vehicle non-traffic accidents					—	—	1	—	1	—	2	—	—	—	1	—	2	—
Other road vehicle accidents	230	51	159	29	138	27	131	19	101	9	126	21	119	17	81	21	88	14
Motorcyclists:																		
Motor vehicle traffic accidents	651	27	659	48	1,018	83	1,179	89	1,132	88	1,179	96	1,251	104	1,430	132	1,529	151
Motor vehicle non-traffic accidents					8	—	18	—	5	—	5	—	7	—	9	1	10	—
Other road vehicle accidents																		
Motor vehicle occupants and others:																		
Motor vehicle traffic accidents	762	167	549	155	519	175	726	270	790	285	782	302	946	340	1,092	406	1,182	465
Motor vehicle non-traffic accidents	47	11	26	6	64	2	33	2	31	4	18	6	24	1	20	—	30	2
Other road vehicle accidents					27	11	17	6	11	5	6	7	8	16	14	7	6	7

Table XCIV.   Suicide: Death rates per million living, by sex and age, in standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1956–60, England and Wales

	Males					Females				
	All ages over 15	15–	25–	45–	65 and over	All ages over 15	15–	25–	45–	65 and over
ENGLAND AND WALES	190	46	120	262	406	114	22	66	170	182
Urban and rural aggregates:										
Conurbations	206	63	133	274	440	127	28	78	185	208
Areas outside conurbations:										
Urban areas with populations of 100,000 and over	194	35	114	255	491	124	26	70	183	207
Urban areas with populations of 50,000 and under 100,000	210	53	141	276	450	138	*14*	84	199	225
Urban areas with populations under 50,000	185	43	112	255	373	107	17	53	167	167
Rural districts	161	31	99	246	326	80	19	49	123	114
Regional summary:										
Northern	191	45	118	275	413	88	*13*	59	134	138
East and West Ridings	205	55	133	271	437	116	32	54	171	207
North Western	214	63	131	287	462	129	23	66	188	231
North Midland	175	38	100	256	377	105	*13*	65	149	192
Midland	189	35	109	262	502	111	17	55	181	194
Eastern	169	37	115	237	333	108	21	63	164	161
London and South Eastern	198	62	131	265	389	129	30	86	185	186
Southern	157	42	107	215	351	104	*20*	65	161	144
South Western	194	27	125	267	418	111	*15*	62	169	162
Wales (including Monmouthshire)	162	*22*	95	237	332	80	*20*	42	131	109
Conurbations:										
Tyneside	224	*49*	137	304	533	112	*17*	69	156	224
West Yorkshire	219	68	128	295	455	127	*31*	61	177	225
South East Lancashire	237	79	152	314	483	129	*22*	68	190	220
Merseyside	153	*31*	109	221	314	96	*16*	62	141	175
West Midlands	191	38	114	255	524	119	*21*	62	188	220
Greater London	204	72	138	268	411	135	34	91	193	201

Table XCV. Suicide: Death rates per million living, by sex and age, and Standardised Mortality Ratios by sex, 1901 to 1960, England Wales

	All ages	0–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over	S.M.R.* (1950–52 = 100)
Males												
1901–10 ..	157	1	4	36	91	152	252	397	523	508	382	170
1911–20 ..	130	—	3	32	69	122	196	278	389	405	350	138
1921–30 ..	166	—	2	31	78	111	211	346	487	513	438	149
1931–35 ..	196	0	2	40	96	140	210	379	542	533	483	163
1936–40 ..	172	—	2	32	89	118	177	284	462	477	466	113
1941–45 ..	126	—	3	43	72	100	128	185	271	347	382	93
1946 ..	138	—	5	31	49	94	154	200	300	391	465	103
1947 ..	136	—	3	35	59	94	123	209	314	382	480	100
1948 ..	144	—	2	29	74	86	134	219	338	469	388	108
1949 ..	144	—	1	32	60	80	134	236	334	422	490	109
1950 ..	136	—	1	30	60	70	122	222	323	416	421	102
1951 ..	135	—	6	24	53	78	120	213	303	410	477	100
1952 ..	132	—	1	34	55	78	120	198	320	389	413	98
1953 ..	142	—	1	28	67	89	126	222	325	411	480	106
1954 ..	149	—	3	26	59	93	145	235	340	430	439	110
1955 ..	143	—	4	26	54	97	130	213	322	422	463	105
1956 ..	149	—	2	25	65	94	130	221	350	426	490	109
1957 ..	146	—	2	27	60	94	135	217	344	404	475	107
1958 ..	146	—	2	28	64	104	147	219	329	366	457	106
1959 ..	142	—	2	29	54	105	135	206	316	417	406	104
1960 ..	139	—	2	30	86	115	139	200	308	329	384	101
Females												
1901–10 ..	49	—	3	34	45	56	81	109	108	88	49	103
1911–20 ..	47	—	2	30	41	50	74	100	102	81	52	92
1921–30 ..	63	—	1	25	43	57	87	135	143	108	63	110
1931–35 ..	80	—	0	23	49	77	108	154	166	134	84	129
1936–40 ..	79	—	1	14	38	65	99	155	169	142	89	122
1941–45 ..	62	—	1	9	22	52	77	108	128	117	73	91
1946 ..	74	—	1	15	26	53	87	135	157	146	92	108
1947 ..	76	—	—	10	28	51	80	134	160	166	114	110
1948 ..	78	—	—	11	20	50	80	141	183	173	98	113
1949 ..	75	—	1	15	26	45	77	127	165	165	138	109
1950 ..	70	—	1	10	23	34	75	124	157	153	115	101
1951 ..	72	—	—	9	20	38	66	135	160	167	105	103
1952 ..	68	—	1	11	12	35	66	118	154	164	97	97
1953 ..	76	—	3	10	22	39	79	127	167	171	127	108
1954 ..	81	—	—	12	23	52	77	135	167	198	130	115
1955 ..	84	—	1	7	19	45	75	148	190	201	126	119
1956 ..	90	—	1	11	27	49	71	156	203	217	141	126
1957 ..	92	—	1	12	30	47	80	145	214	230	136	129
1958 ..	91	—	—	13	33	50	83	151	190	208	162	127
1959 ..	89	—	1	14	33	50	88	140	200	195	137	124
1960 ..	87	—	2	15	38	56	86	147	180	186	119	121

* S.M.R.s are based on civilian deaths and civilian populations for the years 1940–1949 inclusive.

Table XCVI. Suicide: Proportions per 1,000 deaths according to external agent, by sex and age, 1956–60, England and Wales

	Males					Females				
	All ages 15 and over	15–	35–	55–	75 and over	All ages 15 and over	15–	35–	55–	75 and over
Domestic gas poisoning ..	447	471	445	431	490	555	593	527	563	585
Other poisoning	148	148	190	128	76	234	204	265	222	208
Hanging or strangulation..	156	147	146	167	158	59	40	61	61	63
Drowning	82	45	63	103	117	96	66	92	108	87
Firearms or explosives ..	62	83	59	60	46	5	14	5	2	2
Cutting and piercing instruments	40	20	30	49	68	13	10	12	13	14
Jumping from high place ..	21	22	20	22	24	21	28	16	22	37
Other agents	44	64	47	40	21	17	45	22	9	4
Total	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**
Total number of suicides ..	15,701	2,188	5,488	6,532	1,493	10,490	1,072	3,732	4,846	840

Table XCVII. Accidents in the home and residential institutions: Deaths and death rates per million living, by sex and age, 1960, England and Wales

		All accidents in the home and residential institutions (E870–E936)		Poisoning by utility (illuminating) gas (E890)		Burns and scalds (E916, E917)		Fall on stairs, from ladders, and from one level to another (E900–E902)		Fall on same level (E903)		Unspecified falls (E904)		Other accidents in the home and residential institutions (rem. E870–E936)	
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
All ages	Deaths	2,478	4,552	391	526	221	432	488	709	443	1,479	268	839	667	567
	Rate	112	192	18	22	10	18	22	30	20	62	12	35	30	24
0–4	Deaths	346	244	6	2	42	49	21	11	3	1	3	1	271	180
	Rate	190	141	3·3	1·2	23	28	12	6·4	1·6	0·6	1·6	0·6	149	104
5–14	Deaths	57	60	4	10	5	36	5	5	1	—	—	2	42	7
	Rate	16	18	1·1	3·0	1·4	11	1·4	1·5	0·3	—	—	0·6	12	2·1
15–44	Deaths	249	155	68	30	20	42	35	9	2	2	2	3	122	69
	Rate	28	17	7·6	3·3	2·2	4·6	3·9	1·0	0·2	0·2	0·2	0·3	14	7·6
45–64	Deaths	434	493	96	98	33	74	106	73	32	46	11	35	156	167
	Rate	77	80	17	16	5·9	12	19	12	5·7	7·5	2·0	5·7	28	27
65–74	Deaths	331	690	70	102	28	72	91	137	59	193	43	108	40	78
	Rate	234	331	50	49	20	35	64	66	42	93	30	52	28	37
75 and over ..	Deaths	1,061	2,910	147	284	93	159	230	474	346	1,237	209	690	36	66
	Rate	1,538	2,286	213	223	135	125	333	372	501	972	303	542	52	52

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Table XCVIII. Accidents in the home and residential institutions: Deaths by month of occurrence, 1952–57, and 1958 to 1960, England and Wales

			PERSONS											
ICD No.	Cause of death		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
E870–E888	Poisoning	1952–57	104	96	110	100	98	82	88	97	86	112	83	90
		1958	18	19	25	24	11	23	21	10	15	21	21	27
		1959	27	12	21	29	25	25	17	20	19	23	20	11
		1960	33	30	35	31	30	32	20	24	24	25	24	34
E890–E895	Gas poisoning	1952–57	529	566	395	301	231	188	166	164	200	296	447	463
		1958	116	61	105	80	46	59	38	41	43	64	94	140
		1959	161	127	101	68	49	40	31	45	41	46	91	97
		1960	137	108	89	54	62	34	43	40	57	78	100	172
E900	Fall on stairs	1952–57	556	476	451	363	342	287	316	346	344	395	449	566
		1958	123	78	93	71	62	53	48	56	60	54	61	85
		1959	96	98	73	52	49	49	57	57	65	55	77	86
		1960	90	66	63	66	53	57	60	49	66	56	76	122
E901	Fall from ladders	1952–57	16	14	25	18	27	24	25	20	28	27	20	20
		1958	5	1	2	5	2	3	2	2	7	2	5	2
		1959	3	4	2	3	5	3	1	7	7	5	6	4
		1960	3	3	2	4	1	3	3	2	5	9	3	—
E902	Other falls from one level to another	1952–57	235	203	208	196	198	182	198	160	171	195	169	183
		1958	31	22	38	37	24	33	33	29	36	31	28	37
		1959	37	49	45	53	45	25	25	36	29	32	35	28
		1960	35	35	29	38	26	29	27	24	21	18	22	36
E903	Fall on same level	1952–57	688	706	670	527	531	532	509	540	538	591	578	650
		1958	148	131	144	134	123	103	111	119	122	131	135	166
		1959	172	211	175	132	130	121	131	119	106	134	132	162
		1960	154	203	223	138	151	132	152	136	153	169	156	178
E904	Unspecified falls	1952–57	929	851	922	747	705	601	612	545	613	675	704	857
		1958	172	140	158	128	161	136	85	96	67	79	104	142
		1959	144	148	146	95	103	90	79	80	73	90	94	115
		1960	124	111	93	95	94	77	76	72	78	96	78	111
E914	Accident caused by electric current	1952–57	22	15	25	19	14	19	19	30	21	24	31	22
		1958	9	6	4	4	2	5	4	4	4	3	4	8
		1959	4	3	2	3	10	4	3	6	8	3	2	3
		1960	—	2	4	3	3	5	4	2	3	5	4	7
E916	Accident caused by fire and explosion of combustible material	1952–57	500	549	398	307	177	172	143	123	126	220	282	426
		1958	86	71	96	61	33	29	25	14	15	29	33	80
		1959	122	111	69	42	44	33	22	23	17	28	49	63
		1960	81	89	84	50	34	30	15	14	24	31	48	90

Code	Description	Year												
E917	Accident caused by hot substance, corrosive liquid, and steam	1952–57	70	67	64	58	45	56	35	30	31	48	60	45
		1958	24	11	19	10	8	9	2	7	5	5	9	11
		1959	11	14	7	5	11	8	6	4	4	7	6	14
		1960	7	10	7	8	7	6	1	3	2	3	6	10
E921	Inhalation and ingestion of food causing obstruction or suffocation	1952–57	226	192	235	187	149	123	128	96	132	173	153	214
		1958	37	25	38	36	32	16	18	17	22	32	27	29
		1959	31	34	31	33	15	21	18	19	14	17	34	41
		1960	34	34	22	28	33	17	29	26	32	21	25	42
E924	Accidental mechanical suffocation in bed and cradle	1952–57	138	109	115	97	101	96	87	92	78	97	106	121
		1958	18	20	25	15	10	10	8	11	8	13	25	15
		1959	18	13	11	8	10	11	6	8	13	10	9	19
		1960	17	11	11	7	15	10	10	12	4	8	10	15
E929	Drowning and submersion	1952–57	16	19	28	38	35	52	28	33	35	29	27	21
		1958	5	5	8	10	9	6	2	7	6	6	5	2
		1959	5	6	5	3	3	5	6	7	6	3	6	2
		1960	5	3	7	5	5	8	5	8	5	2	5	7
Rem. E870–E936	All other accidents	1952–57	169	257	129	130	121	107	102	114	95	87	81	84
		1958	22	31	19	21	17	26	20	14	17	24	19	27
		1959	21	24	19	15	17	28	20	28	17	19	12	35
		1960	19	22	20	29	26	27	25	23	30	28	21	20
E870–E936	All accidents in the home and residential institutions	1952–57	4,198	4,120	3,775	3,088	2,774	2,521	2,456	2,390	2,498	2,969	3,190	3,762
		1958	814	621	774	636	540	502	417	423	426	494	570	771
		1959	852	854	707	541	516	463	422	459	419	476	573	680
		1960	739	727	689	556	540	467	470	435	504	549	578	844

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Table XCIX.   Accidents in the home and residential institutions: Deaths by cause and sex at age 65 and over, 1960, England and Wales

ICD No.	Cause of death	Home			Residential institutions		
		Males	Females	Persons	Males	Females	Persons
E870–E888	Accidental poisoning by solid and liquid substances	18	48	66	—	—	—
E871 ..	Accidental poisoning by barbituric acid and derivatives..	12	36	48	—	—	—
E883 ..	Accidental poisoning by corrosive aromatics, acids, and caustic alkalis	1	1	2	—	—	—
Rem. E870–E888	Accidental poisoning by other solid and liquid substances	5	11	16	—	—	—
E890–E895	Accidental poisoning by gases and vapours	220	398	618	1	—	1
E890 ..	Accidental poisoning by utility (illuminating) gas	216	386	602	1	—	1
Rem. E890–E895	Accidental poisoning by other gases and vapours	4	12	16	—	—	—
E900–E904	Accidental falls	791	2,216	3,007	187	623	810
E900 ..	Fall on stairs	220	412	632	14	14	28
E901 ..	Fall from ladders	12	9	21	—	—	—
E902 ..	Other falls from one level to another..	49	110	159	26	66	92
E903 ..	Fall on same level	296	1,003	1,299	109	427	536
E904 ..	Unspecified falls	214	682	896	38	116	154
E910–E936	Other accidents	142	282	424	33	33	66
E916 ..	Accident caused by fire and explosion of combustible material	95	208	303	11	2	13
E917 ..	Accident caused by hot substance, corrosive liquid, and steam.. ..	14	19	33	1	2	3
E921 ..	Inhalation and ingestion of food causing obstruction or suffocation	2	11	13	14	21	35
E929 ..	Accidental drowning and submersion	8	8	16	1	—	1
Rem. E910–E936	Remainder of other accidents ..	23	36	59	6	8	14
E870–E936	All accidents in the home and residential institutions	1,171	2,944	4,115	221	656	877

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Table C. Accidents in the home and residential institutions: Deaths by cause, sex, and age, 1960, England and Wales

ICD No.	Cause of death		All ages	0–	5–	15–	45–	65–	75 and over
E870–E888	Accidental poisoning by solid and liquid substances	M	139	10	—	32	79	14	4
		F	191	13	1	34	95	33	15
E871 ..	Accidental poisoning by barbituric acid and derivatives	M	88	1	—	16	59	10	2
		F	141	1	—	29	75	26	10
E872 ..	Accidental poisoning by aspirin and salicylates	M	15	5	—	2	7	1	—
		F	24	6	1	2	6	4	5
E890–E895	Accidental poisoning by gases and vapours	M	412	7	4	79	101	74	147
		F	547	2	10	35	102	110	288
E900 ..	Fall on stairs ..	M	324	4	—	18	68	61	173
		F	493	4	1	7	55	102	324
E901 ..	Fall from ladders	M	29	—	—	4	13	4	8
		F	10	—	—	—	1	5	4
E902 ..	Other falls from one level to another	M	135	17	5	13	25	26	49
		F	206	7	4	2	17	30	146
E903 ..	Fall on same level	M	443	3	1	2	32	59	346
		F	1,479	1	—	2	46	193	1,237
E904 ..	Unspecified falls	M	268	3	—	2	11	43	209
		F	839	1	2	3	35	108	690
E914 ..	Accident caused by electric current ..	M	21	2	1	7	9	2	—
		F	19	—	—	8	6	·2	3
E916 ..	Accident caused by fire and explosion of combustible material ..	M	189	30	4	18	31	24	82
		F	394	41	36	42	65	63	147
	Burns by clothing	M	41	2	2	3	10	6	18
		F	234	21	25	26	42	32	88
	from domestic fire (open) ..	M	11	1	2	1	—	2	5
		F	81	7	10	10	15	11	28
	gas fire, stove, etc. ..	M	1	1	—	—	—	—	—
		F	24	—	3	6	2	4	9
	electric fire ..	M	3	—	—	—	1	—	2
		F	45	2	2	2	5	7	27
	other specified ..	M	21	—	—	1	9	4	7
		F	43	7	6	6	8	6	10
	not specified ..	M	5	—	—	1	—	—	4
		F	41	5	4	2	12	4	14
	Burns by falling into fire ..	M	36	2	—	—	7	5	22
		F	44	1	—	—	9	9	25
	Burns by conflagration ..	M	52	16	2	7	6	7	14
		F	48	6	5	7	7	9	14
	Burns by other specified means ..	M	54	9	—	8	7	5	25
		F	63	13	5	7	7	12	19
	Burns by means not specified ..	M	6	1	—	—	1	1	3
		F	5	—	1	2	—	1	1
E917 ..	Accident caused by hot substance, corrosive liquid, and steam ..	M	32	12	1	2	2	4	11
		F	38	8	—	—	9	9	12
E921 ..	Inhalation and ingestion of food causing obstruction or suffocation	M	179	108	6	20	29	6	10
		F	163	84	2	9	36	16	16
E924 ..	Accidental mechanical suffocation in bed or cradle ..	M	76	75	—	1	—	—	—
		F	53	52	—	1	—	—	—
E929 ..	Accidental drowning and submersion	M	36	18	2	2	5	4	5
		F	29	1	—	6	14	3	5
Rem. E870–E936	Other accidents ..	M	195	57	33	49	29	10	17
		F	91	30	4	6	12	16	23
E870–E936	All accidents in the home and residential institutions ..	M	2,478	346	57	249	434	331	1,061
		F	4,552	244	60	155	493	690	2,910

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Table CI. Accidental falls: Death rates per million living, by sex and age, and Standardised Mortality Ratios by sex, 1901 to 1960, England and Wales

			All ages	0–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over	S.M.R.† (1950–52 = 100)
							Males							
1901–10	..	..	84	45	25	23	24	39	69	119	209	420	1,253	169
1911–20	..	..	107	38	30	39	36	56	93	155	254	454	1,373	213
1921–30	..	..	85	25	18	31	31	37	56	93	161	352	1,306	146
1931–35	..	..	93	25	18	31	33	37	47	79	146	338	1,609	146
1936–40	..	..	120	31	24	34	40	51	58	95	177	414	1,910	178
1941–45	..	..	109	35	26	40	30	41	58	87	157	337	1,448	156
1946	..	..	86	27	21	25	26	30	43	57	107	245	1,203	115
1947	..	..	97	31	26	33	42	36	50	68	108	254	1,352	126
1948	..	..	80	27	22	22	27	37	41	49	85	211	1,122	104
1949	..	..	78	20	18	28	31	33	38	57	68	185	1,162	100
1950	..	..	74	14	18	19	25	29	34	50	71	183	1,139	93
1951	..	..	86	17	17	17	34	35	40	51	85	241	1,275	108
1952	..	..	79	16	17	23	30	30	30	47	78	221	1,169	99
1953	..	..	84	14	10	22	29	30	33	52	80	246	1,254	104
1954	..	..	99	11	9	20	23	27	39	52	86	280	1,659	122
1955	..	..	94	14	16	13	25	28	38	44	85	248	1,574	115
1956	..	..	99	9	15	16	31	25	34	45	77	281	1,698	120
1957	..	..	92	15	13	20	21	23	29	47	78	262	1,491	111
1958*	..	..	92	14	10	15	27	28	32	41	82	232	1,561	112
1959*	..	..	96	15	11	17	21	27	34	46	87	259	1,588	116
1960*	..	..	86	12	17	22	23	22	29	48	78	207	1,417	104
							Females							
1901–10	..	..	68	27	6	4	4	10	26	64	132	389	1,657	143
1911–20	..	..	69	20	6	5	5	8	20	50	108	356	1,752	132
1921–30	..	..	73	13	4	4	4	5	10	31	85	318	1,845	117
1931–35	..	..	100	14	5	3	3	6	8	30	92	388	2,283	138
1936–40	..	..	136	18	6	4	5	6	12	34	123	476	2,714	167
1941–45	..	..	118	17	8	5	6	6	11	26	81	346	2,135	127
1946	..	..	110	15	4	3	5	6	6	11	59	260	2,037	110
1947	..	..	111	11	7	9	4	4	5	15	58	286	1,947	108
1948	..	..	100	11	4	4	4	3	4	18	51	231	1,726	94
1949	..	..	105	10	6	3	2	2	4	13	50	232	1,840	98
1950	..	..	113	8	2	2	1	3	5	14	45	230	1,994	103
1951	..	..	117	9	—	2	5	3	3	12	46	240	2,034	105
1952	..	..	105	9	2	2	5	2	5	11	44	218	1,743	92
1953	..	..	123	7	4	2	2	4	5	15	50	241	2,018	106
1954	..	..	141	6	3	3	1	3	5	13	45	295	2,249	118
1955	..	..	144	8	3	2	—	2	6	15	50	281	2,261	118
1956	..	..	149	8	3	2	4	2	5	13	50	275	2,338	120
1957	..	..	142	9	2	1	2	2	5	14	40	250	2,178	111
1958*	..	..	149	6	2	—	3	1	5	12	41	273	2,247	115
1959*	..	..	151	12	3	1	1	4	5	12	46	259	2,234	115
1960*	..	..	150	8	2	3	3	2	6	14	46	256	2,190	113

* According to the Seventh Revision of the International Classification (Nos. E900–E904). Other years according to the classification in use at the time.

† S.M.R.s are based on civilian deaths and civilian populations for the years 1940–1949 inclusive.

Table CII. Accidental deaths: Deaths, infant mortality rates per 1,000 live births, and death rates per million living at all ages and ages over one year, by sex and age, 1960, England and Wales

Cause of death (and ICD No.)	Sex	Rate per million living (All ages)	Deaths										
			All ages	0–	1–	5–	10–14	Total under 15	15–	25–	45–	65 and over	Total aged 15 and over
Home accidents*:													
Coal gas poisoning (E890)	M	18	391	2	4	1	3	10	22	46	96	217	381
	F	22	526	2	—	3	7	12	6	24	98	386	514
Other poisoning (E870–E888,E891–E895)	M	7	160	1	10	—	—	11	8	35	84	22	149
	F	9	212	—	13	—	1	14	4	35	99	60	198
Falls (E900–E904)	M	54	1,199	14	13	3	3	33	6	33	149	978	1,166
	F	128	3,027	3	10	6	1	20	3	11	154	2,839	3,007
Burns and scalds (E916, E917)	M	10	221	8	34	4	1	47	5	15	33	121	174
	F	18	432	11	38	31	5	85	14	28	74	231	347
Choking and suffocation (E921, E922, E924, E925)	M	13	285	174	24	6	2	206	9	20	32	18	79
	F	10	226	131	13	3	—	147	3	7	37	32	79
Other (Remainder of E870–E936)	M	10	222	27	35	11	23	96	20	30	40	36	126
	F	5	129	13	10	1	2	26	7	13	31	52	103
Total home accidents (E870–E936)	M	112	2,478	226	120	25	32	403	70	179	434	1,392	2,075
	F	192	4,552	160	84	44	16	304	37	118	493	3,600	4,248
Transport accidents:													
Motor vehicle road accidents involving injury to:—													
Motorcyclist† (E814, E815, E821)	M	69	1,529	—	4	2	2	9	853	391	246	30	1,520
	F	6	151	1	—	—	1	1	75	45	26	4	150
Pedal cyclist (E813)	M	22	477	—	4	18	64	86	69	68	169	85	391
	F	4	91	—	1	1	12	14	19	14	36	8	77
Pedestrian (E812)	M	67	1,488	2	92	138	42	274	65	128	345	676	1,214
	F	50	1,174	1	60	71	33	165	30	58	270	651	1,009
Occupant of motor vehicle (Remainder of E810–E825)	M	54	1,182	3	10	15	8	36	315	435	298	98	1,146
	F	20	465	3	6	6	15	30	84	107	157	87	435
Other road accidents, involving injury to:—													
Pedal cyclist (E843)	M	4	88	—	—	5	6	11	18	13	28	18	77
	F	7	14	—	—	·	4	4	1	1	7	1	10
Pedestrian (E840–E842, E844)	M	1	20	—	1	3	—	4	—	—	4	12	16
	F	1	25	—	—	—	—	—	—	1	5	19	25

Table CII—*continued*

Cause of death (and ICD No.)		Rate per million living (All ages)	All ages	Deaths									
				0–	1–	5–	10–14	Total under 15	15–	25–	45–	65 and over	Total aged 15 and over
All other transport accidents:—including rail, air, water (Remainder of E800–E866)	M	24	522	1	11	12	21	45	109	157	176	35	477
	F	2	49	—	5	3	2	10	4	12	14	9	39
Total transport accidents (E800–E866)	M	240	5,306	7	122	193	143	465	1,429	1,192	1,266	954	4,841
	F	83	1,969	4	72	81	67	224	213	238	515	779	1,745
Other accidents: Poisonings (E870–E895)	M	5	108	—	—	1	—	1	11	31	42	23	107
	F	3	75	1	—	—	1	2	7	18	22	26	73
Falls (E900–E904)	M	32	707	—	5	6	29	40	60	122	192	293	667
	F	22	532	2	2	2	3	9	5	12	25	481	523
Burns (E916, E917)	M	2	54	—	1	5	2	8	5	16	14	11	46
	F	1	23	—	3	—	1	4	3	4	8	4	19
Drowning (E929)	M	29	641	—	68	89	59	216	75	93	156	101	425
	F	7	168	—	19	12	18	49	3	19	52	45	119
Other (Remainder of E870–E936)	M	40	882	18	9	19	29	75	139	299	310	59	807
	F	4	100	15	4	7	2	28	7	12	19	34	72
Total other accidents (E870–E936)	M	108	2,392	18	83	120	119	340	290	561	714	487	2,052
	F	38	898	18	28	21	25	92	25	65	126	590	806
Total all accidents (E800–E936)	M	461	10,176	251	325	338	294	1,208	1,789	1,932	2,414	2,833	8,968
	F	313	7,419	182	184	146	108	620	275	421	1,134	4,969	6,799
All accidents (E800–E936) Infant mortality rate and death rate per million living	M	461		0·62	226	203	156	225	602	322	429	1,347	537
	F	313		0·48	135	92	60	121	93	69	184	1,481	366

* Including deaths in residential institutions.　　　　† Including passengers.

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CHANGES IN NUMBERS OF DEATHS AND AGE AT DEATH FOR CERTAIN DISEASES, 1920–1960

Death rates, when examined over a period of time, may be shown to vary considerably. While the Standardised Mortality Ratio from all causes has been showing a downward trend death rates from any one disease may vary, some increasing, for example, cerebral embolism and thrombosis, others decreasing, for example, tuberculosis. At the same time, the age at which any particular disease causes death may vary, so that what at one time afflicted the older age-groups may now cause mortality at younger ages, and vice versa. The causes of these variations are well known. In scarlet fever the virulence of the illness has decreased. The course of the illness is controlled in diabetes, so that it is no longer so lethal. New therapies introduced in the last thirty to forty years, such as the sulphonamides and antibiotics, have reduced the fatality rates of many conditions and improved surgery has contributed to diminish the risk of death, as, for example, in cases of perforated peptic ulcer.

One way of examining the effects of the change in death rates is to employ the kind of technique used in preparing life tables. Starting with a standard number of births, for example, 100,000 males or females, in any year, the age-specific death rates current in that year are applied to the births. It is thus found how many people would die before reaching a given age, if throughout their lives they were subject to the death rates in a particular year. This gives a better idea of the potential saving in lives by the decrease in death rates than does a comparison of death rates at various times. In the examples which follow, it is not proposed to cover all major causes of death but eleven selected causes have been examined. The life table procedure has been modified so that the deaths shown in any column of the tables are those which would have occurred from that cause, without the possibility of dying from other causes having been eliminated. Where an average figure for three years is shown, this is because the deaths have been taken from the d_x column in the standard English Life Tables, which are based on the average of three years' experience of which the middle one is a Census year. As there was no Census of Population in 1941, 1938 has been taken, so as to avoid the disruption of the mortality rates by the war years. A single year's experience has also had to be used for 1960. An example, showing the calculation headings and the first few lines of working is appended (page 205).

Table CIII(A) is for all forms of tuberculosis. The column headed males, 1960, shows that, of 100,000 male children born, and subject throughout their lives to the 1960 death rates from tuberculosis, 866 would be expected to die of this disease. Of these, 1 would die before reaching age 1, a total of 3 before reaching age 5, a total of 90 before reaching age 45, and so on. (See also Diagram 6(A).) It is clear that there has been a very striking reduction in the overall probability of dying from some form of tuberculosis. Compared with 7,239 expected male deaths based on the 1920–22 rates, there would be 866 male deaths according to the 1960 rates, a reduction of 88 per cent. The reduction in expected female deaths over the same period is 95 per cent. If the reduction had been uniformly distributed over all age-groups the relative positions of

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Table CIII. Expected total deaths before reaching a given age among 100,000 male or female persons born, subject to the death rates for the year shown

(A) Tuberculosis, all forms

Age-group	Males					Females				
	1960	1950–52	1938	1930–32	1920–22	1960	1950–52	1938	1930–32	1920–22
0–	1	15	70	109	165	2	14	51	86	129
1–	3	70	241	381	538	4	66	215	319	462
5–	4	90	313	500	716	5	87	293	442	652
10–	4	108	380	597	875	6	107	375	588	902
15–	6	154	603	931	1,265	9	189	719	1,090	1,464
20–	8	248	987	1,459	1,914	12	345	1,198	1,687	2,114
25–	16	395	1,381	1,963	2,530	20	524	1,601	2,223	2,690
30–	30	556	1,726	2,466	3,156	41	686	1,930	2,645	3,204
35–	57	728	2,111	3,007	3,832	65	811	2,175	3,001	3,669
40–	90	922	2,521	3,573	4,534	84	917	2,373	3,308	4,081
45–	142	1,178	2,991	4,193	5,195	111	1,010	2,550	3,559	4,435
50–	207	1,504	3,494	4,760	5,804	128	1,104	2,695	3,785	4,731
55–	317	1,879	3,939	5,241	6,323	150	1,190	2,838	3,985	4,982
60–	450	2,247	4,295	5,609	6,744	176	1,275	2,969	4,152	5,206
65–	603	2,558	4,522	5,853	7,024	209	1,354	3,074	4,283	5,389
70–	736	2,738	4,641	5,979	7,161	244	1,420	3,143	4,369	5,506
75–	817	2,821	4,701	6,027	7,218	276	1,468	3,193	4,424	5,569
80–	854	2,848	4,711	6,043	7,232	295	1,490	3,219	4,445	5,598
85 and over	866	2,854	4,715	6,047	7,239	305	1,498	3,226	4,452	5,608
Quartiles	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.
1st	55 5	39 7	27 5	25 6	24 2	43 0	25 10	20 11	20 2	19 5
2nd	64 4	53 10	43 0	40 2	38 5	60 6	37 6	30 2	30 0	31 1
3rd	71 9	63 7	55 6	53 0	51 11	72 10	56 2	46 4	45 7	46 9

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Diagram 6(A)

TUBERCULOSIS, ALL FORMS

Expected total deaths
per 100,000 births

FEMALES

MALES

1920-22
1930-32
1938
1950-52
1960

8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0

Age-group

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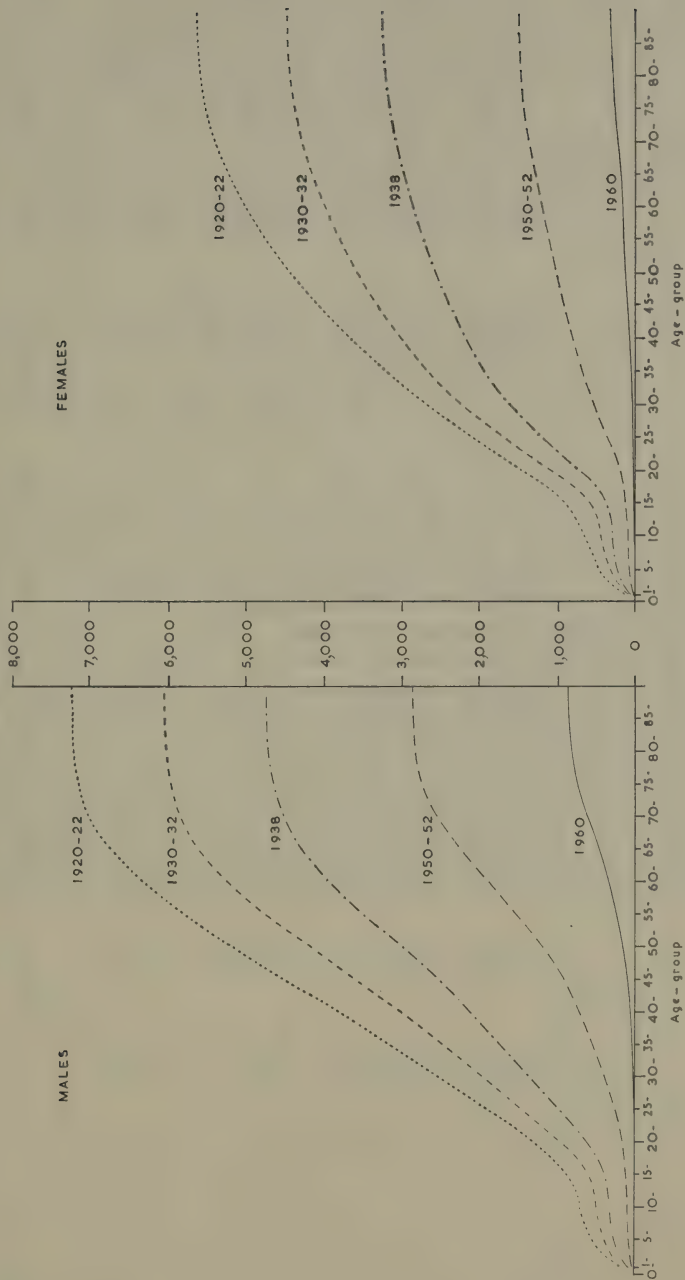
the quartiles, that is, those ages before which one, two or three-quarters of the total deaths take place, would have remained unchanged. But, in fact, the quartiles have moved up into older age-groups, showing a relatively greater reduction in expected deaths in the younger age-groups. Thus, for the 1920–22 experience, one quarter of the male deaths was expected to occur before the age of 24 years 2 months was reached, whereas, with death rates current in 1960, one quarter of the deaths would not be expected to occur until age 55 years 5 months was reached. The position of the other two quartiles has been similarly pushed into the higher age-groups, so that whereas on the 1920–22 experience half the expected deaths would take place after age 38 years 5 months, on the 1960 rates they would occur after age 64 years 4 months; corresponding data for females would be 31 years 1 month in 1920–22 and 60 years 6 months in 1960.

The total of 866 expected deaths on the 1960 rates would have occurred by age 43 years 7 months on the 1950–52 rates, by 23 years 5 months on the 1938 rates, 19 years 0 months on the 1930–32 rates and 14 years 9 months on the 1920–22 rates. The total of 305 expected deaths for females based on the 1960 rates would, on the 1920–22 experience, have occurred before age 3 years 1 month.

Table CIII(B) shows similar data for respiratory tuberculosis only. The 5,910 expected male deaths based on death rates in 1920–22 represent 81·6 per cent of the 7,239 expected deaths from all forms of tuberculosis shown in Table CIII(A); for females the proportion is 77·8 per cent. By 1960, 93·6 per cent of the total male deaths from tuberculosis were due to the respiratory form, compared with 81·3 per cent for females. There was a reduction of 86 per cent in the total expected deaths for males and of 94 per cent for females between 1920–22 and 1960. The decrease in the total expected deaths was greatest for males between 1950–52 and 1960, but for females between 1938 and 1950–52. The position of the quartiles shows that for both males and females there was relatively little shift into the older age-groups during the period from 1920–22 to 1938, and this movement does not show up strongly until the 1950–52 rates are applied. This means that at first the reduction in the expected deaths was fairly evenly distributed over the age-range, but since 1938 there has been a proportionately greater reduction in deaths in the younger age-group.

Table CIII—continued

(B) Respiratory tuberculosis

Age-group	Males					Females				
	1960	1950–52	1938	1930–32	1920–22	1960	1950–52	1938	1930–32	1920–22
0–	0	5	9	15	15	1	4	9	12	14
1–	1	14	31	51	72	2	12	22	44	66
5–	1	17	39	73	108	2	15	35	70	119
10–	1	21	62	107	170	2	21	74	151	266
15–	2	47	222	363	456	3	79	359	578	725
20–	2	127	557	823	1,022	4	220	797	1,117	1,308
25–	9	260	911	1,278	1,574	10	387	1,167	1,608	1,827
30–	21	406	1,227	1,740	2,148	29	540	1,466	1,991	2,294
35–	44	562	1,581	2,241	2,780	50	656	1,691	2,315	2,717
40–	73	743	1,963	2,773	3,435	67	754	1,873	2,597	3,087
45–	120	985	2,408	3,360	4,052	91	837	2,029	2,822	3,400
50–	181	1,296	2,882	3,901	4,621	106	920	2,162	3,024	3,661
55–	286	1,655	3,303	4,354	5,102	123	996	2,287	3,197	3,875
60–	416	2,009	3,642	4,694	5,489	144	1,071	2,402	3,340	4,059
65–	560	2,307	3,851	4,917	5,737	170	1,139	2,493	3,448	4,206
70–	687	2,476	3,956	5,026	5,852	200	1,196	2,546	3,516	4,296
75–	766	2,555	4,005	5,064	5,896	226	1,235	2,580	3,557	4,342
80–	800	2,579	4,014	5,077	5,906	241	1,254	2,599	3,570	4,359
85 and over	811	2,584	4,017	5,080	5,910	248	1,259	2,602	3,575	4,364
Quartiles	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.
1st	56 0	42 4	31 6	29 11	29 2	43 6	27 10	23 4	22 11	23 2
2nd	64 7	54 11	45 6	42 10	41 4	60 3	38 10	32 3	32 4	33 10
3rd	71 11	64 0	56 7	54 2	53 4	72 8	56 7	47 6	46 10	48 0

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Table CIII(C) and Diagram 6(B) show the expected deaths from all forms of pneumonia per 100,000 persons born in the years shown and subject to the death rates in those years. The total expected deaths have not undergone the spectacular reduction observed for deaths from respiratory tuberculosis. Expected male deaths decreased by 46 per cent from 7,198 on the basis of the 1920–22 mortality rates to 3,890 in 1950–52, but increased to 4,643 in 1960, which represents a decrease of 35 per cent from the 1920–22 total. Female deaths have followed the same pattern, decreasing from 5,556 in 1920–22 to 3,848 in 1950–52, a drop of 31 per cent, and increasing to 5,204 in 1960, which is a decrease of only 6 per cent from the total for 1920–22. There has, however, been a considerable decrease in deaths in the younger age-groups. With the death rates from pneumonia current in 1930–32, one quarter of the total expected deaths would occur before age 3 years 5 months was reached. By 1938, one quarter of the male deaths could be expected to occur before age 7 years 10 months, and of the female deaths before age 4 years 5 months. By 1950–52, one quarter of the total deaths would not be expected to take place before age 54 years 10 months for males and 63 years 2 months for females. By 1960 these ages were extended to 65 years 9 months for males and 72 years 7 months for females. The decrease in the deaths at ages under one in 1950–52 and 1960 is not due to the creation of a new rubric for pneumonia of the newborn in the Sixth Revision of the International Statistical Classification of Diseases, Injuries, and Causes of Death, for the deaths so classified have been included for those years.

An increasing number of deaths from pneumonia would occur among the aged, on the basis of the changing rates. The numbers of males aged 75 and over whose deaths might be attributable to this cause varies from 770 on the basis of the 1920–22 experience, through 863, 892, and 1,409 for the intervening periods, to 2,486 in 1960, while for females the progressive increase has been from 998, through 1,215, 1,233, and 2,099 to 3,662.

For pneumonia, therefore, there would be less wastage of life in the younger age-groups, combined with an increased expectancy of death in the older age-groups, the combined result being, for females, only a slight reduction in total expected deaths for groups subject to the death rates in 1920–22 and 1960.

Table CIII—*continued*

(C) Pneumonia

Age-group	Males					Females				
	1960	1950–52	1938	1930–32	1920–22	1960	1950–52	1938	1930–32	1920–22
0–	346	525	883	1,102	1,173	264	421	691	828	883
1–	403	598	1,335	1,820	2,266	313	493	1,091	1,471	1,888
5–	419	613	1,403	1,923	2,401	323	505	1,154	1,569	2,019
10–	428	622	1,439	1,969	2,452	329	515	1,184	1,612	2,067
15–	443	635	1,500	2,039	2,546	335	525	1,218	1,660	2,120
20–	450	647	1,582	2,127	2,672	343	534	1,257	1,709	2,185
25–	460	662	1,665	2,223	2,831	352	549	1,303	1,767	2,277
30–	477	684	1,770	2,354	3,042	362	568	1,363	1,844	2,393
35–	497	712	1,929	2,548	3,301	378	594	1,439	1,946	2,522
40–	533	759	2,142	2,801	3,608	403	626	1,534	2,058	2,655
45–	580	845	2,438	3,121	3,947	435	673	1,645	2,187	2,806
50–	669	976	2,819	3,486	4,327	487	743	1,776	2,339	2,999
55–	829	1,192	3,249	3,884	4,775	587	848	1,949	2,552	3,253
60–	1,097	1,523	3,701	4,328	5,299	751	1,028	2,179	2,843	3,599
65–	1,523	1,954	4,148	4,826	5,886	1,038	1,310	2,496	3,231	4,046
70–	2,157	2,481	4,600	5,307	6,428	1,542	1,749	2,891	3,699	4,558
75–	2,961	3,044	5,020	5,727	6,848	2,392	2,380	3,366	4,207	5,023
80–	3,831	3,527	5,286	6,009	7,080	3,503	3,084	3,743	4,610	5,345
85 and over	4,643	3,890	5,492	6,170	7,198	5,204	3,848	4,124	4,914	5,556

Quartiles

	Males					Females				
	1960	1950–52	1938	1930–32	1920–22	1960	1950–52	1938	1930–32	1920–22
	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.
1st	65 9	54 10	7 10	3 5	3 4	72 7	63 2	47 5	3 6	3 0
2nd	76 0	69 11	54 1	49 5	44 10	80 11	76 5	62 5	57 9	49 1
3rd	83 0	78 11	69 8	68 0	65 10	85 +	83 7	77 2	74 10	71 2

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Diagram 6(B)

PNEUMONIA

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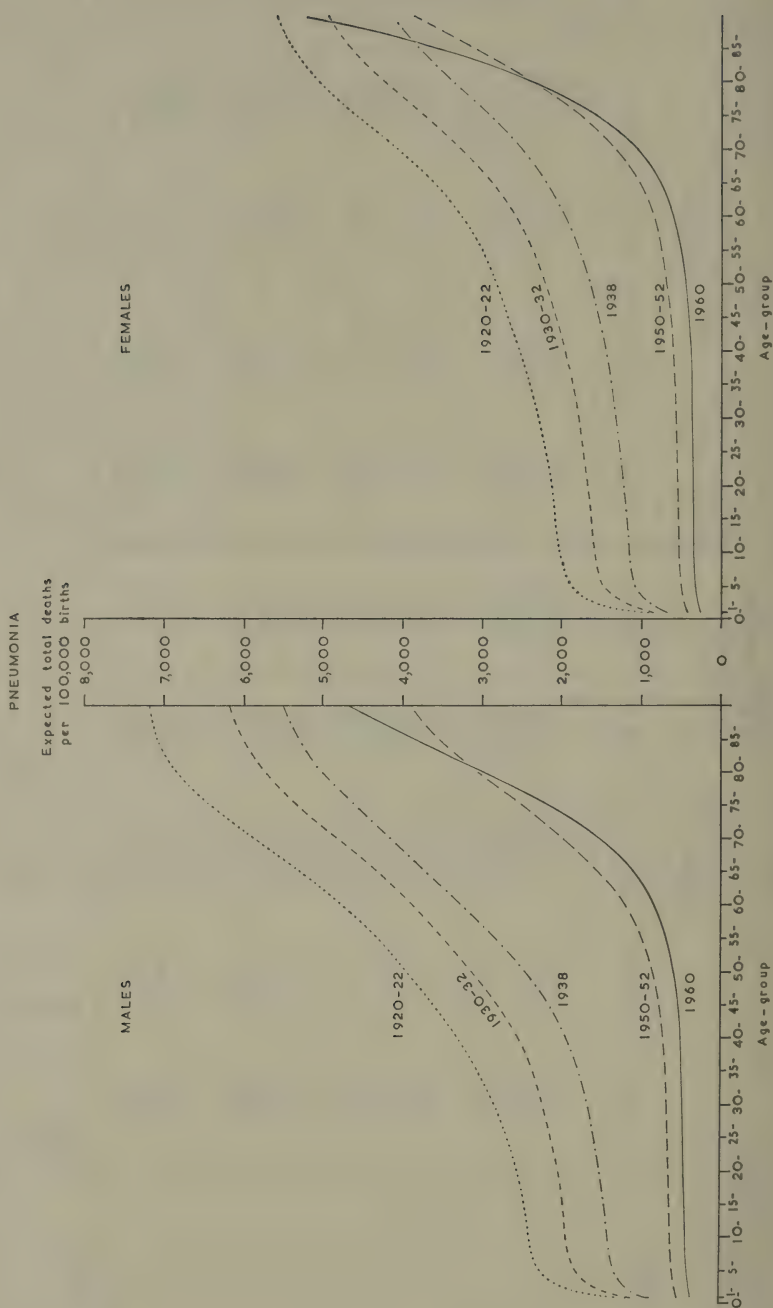
Table CIII—*continued*

(D) Bronchitis, chronic or unspecified

Age-group			Males				Females			
			1960	1950–52	1938	1930–32	1960	1950–52	1938	1930–32
0–	..	..	11	22	70	173	8	17	51	137
1–	..	..	16	28	86	217	10	21	67	175
5–	..	..	19	30	92	224	12	22	71	180
10–	..	..	20	31	97	227	12	23	76	184
15–	..	..	21	32	105	233	12	25	83	190
20–	..	..	22	33	113	242	13	27	89	195
25–	..	..	25	36	126	253	15	29	97	201
30–	..	..	29	42	140	269	19	34	103	210
35–	..	..	41	60	158	300	25	45	110	222
40–	..	..	79	107	190	361	39	60	123	239
45–	..	..	160	242	264	459	65	89	140	269
50–	..	..	375	542	387	603	110	150	174	320
55–	..	..	884	1,121	566	797	186	273	224	415
60–	..	..	1,797	2,050	777	1,073	341	489	303	594
65–	..	..	2,972	3,169	1,041	1,501	579	855	446	901
70–	..	..	4,276	4,328	1,409	2,123	936	1,423	695	1,461
75–	..	..	5,454	5,342	1,854	2,897	1,437	2,183	1,102	2,255
80–	..	..	6,249	6,064	2,260	3,560	1,917	2,902	1,508	3,103
85 and over		..	6,756	6,532	2,588	4,060	2,484	3,632	2,034	3,990

Table CIII(D) gives the expected deaths per 100,000 male or female persons born, from bronchitis, chronic or unspecified. In tracing this cause of death back through the various changes in the International Classification of Diseases, it is difficult to go farther than 1930–32. Table CIII(D) and Diagram 6(C) show that a comparatively insignificant number of deaths would be expected to occur before age 40; the highest number would be the 300 expected male deaths for 1930–32. A slight increase in male deaths would be expected by age 55. On the experience of 1930–32, the total deaths expected before this age would be 603, compared with 542 for 1950–52 and 375 for 1960. Above this age a rapid increase would occur, so that the total expected male deaths based on the 1930–32 rates would be 4,060, compared with 3,990 for females. With the 1938 death rates, the expected male total would be 2,588, a decrease of 1,472 from the total for 1930–32; for females the total would be 2,034, a decrease of 1,956 from the 1930–32 total.

On the basis of the rates current in 1950–52 and 1960, a sudden sharp increase would occur after age 55, the deaths after this age being 5,990 on the basis of the rates in 1950–52 and 6,381 on the rates for 1960. This increase was not paralleled by the female deaths, and therefore cannot be presumed to be due to changes in classification, and is unlikely to be due to changes in diagnostic practice, which should affect both male and female rates indiscriminately. The total expected female deaths based on the rates for 1950–52 would be 3,632, the second highest number for the periods shown, but the expected total for 1960 would only amount to 2,484. The main increase in female deaths did not occur until after age 65, ten years later than for males, and was much less pronounced, which accords with the theory that the elderly male is more vulnerable to certain respiratory diseases than the elderly female.

Diagram 6(C)

BRONCHITIS, CHRONIC OR UNSPECIFIED
Expected total deaths
per 100,000 births

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Table CIII—*continued*

(E) Leukaemia and aleukaemia

Age-group	Males					Females				
	1960	1950-52	1938	1930-32	1920-22	1960	1950-52	1938	1930-32	1920-22
0–	3	3	2	2	1	2	3	2	2	1
1–	22	24	16	11	6	21	21	13	10	4
5–	45	39	28	19	11	36	35	19	15	6
10–	57	52	33	25	14	45	43	24	20	9
15–	68	64	40	31	18	54	52	31	24	11
20–	82	74	46	36	22	60	59	38	28	13
25–	92	85	53	42	25	67	67	43	32	16
30–	103	94	59	47	29	77	75	49	36	20
35–	123	106	65	52	33	84	84	55	41	24
40–	144	120	79	59	39	98	98	64	45	28
45–	166	139	89	68	47	113	113	74	53	34
50–	193	161	104	77	53	136	132	89	63	42
55–	226	192	120	86	61	165	158	100	73	47
60–	276	230	138	98	69	206	190	113	83	54
65–	333	275	159	110	76	253	224	129	95	61
70–	403	309	182	118	83	305	257	138	101	66
75–	459	332	189	122	84	355	284	152	104	68
80–	488	342	191	123	85	385	296	158	107	69
85 and over	503	345	193	123	85	408	300	159	107	69
Quartiles	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.	yrs. m.
1st	40 9	30 7	26 5	20 0	23 9	46 4	35 0	27 0	23 9	31 3
2nd	62 7	56 11	46 0	46 8	47 6	64 9	58 6	52 0	50 6	50 8
3rd	73 2	68 3	66 8	62 6	61 11	75 1	70 2	66 11	63 6	63 7

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Diagram 6(D)

LEUKAEMIA and ALEUKAEMIA

Expected total deaths
per 100,000 births

MALES

1960

1950-52

1938

1930-32

1920-22

Age-group

FEMALES

1960

1950-52

1938

1930-32

1920-22

Age-group
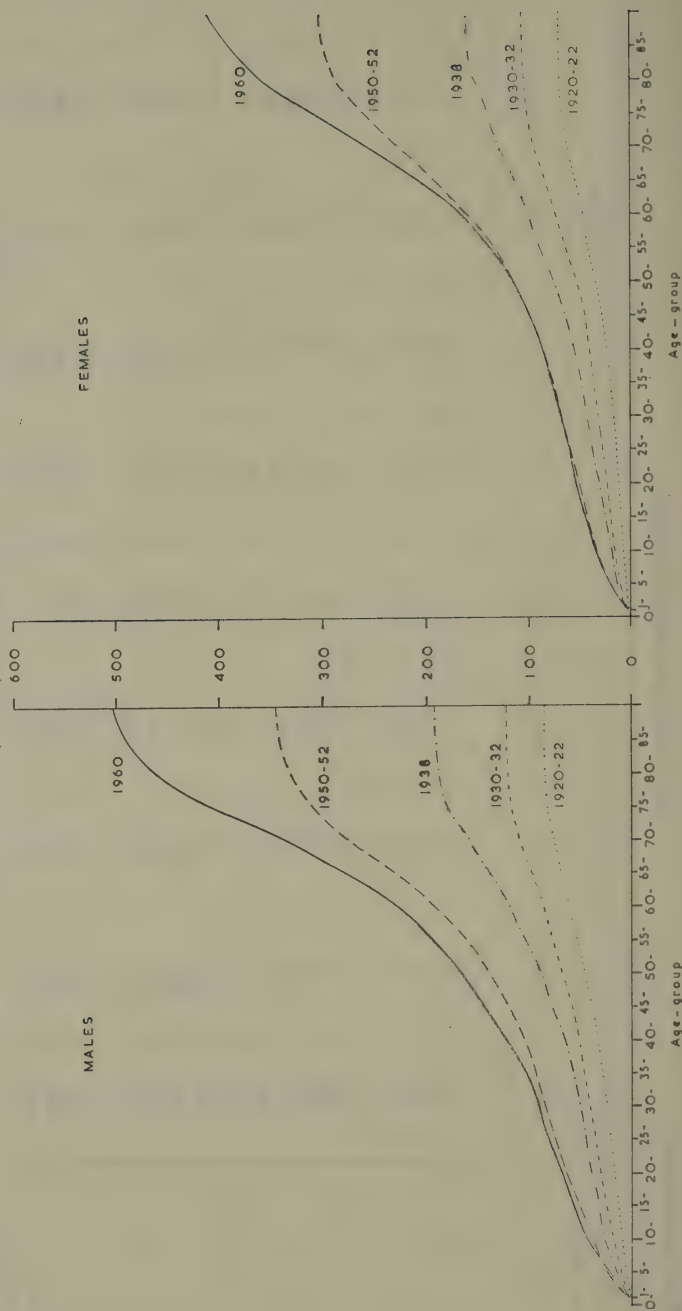
From Table CIII(E) and Diagram 6(D) it is apparent that leukaemia and aleukaemia are responsible for comparatively few deaths. Nevertheless, the expected deaths based on current rates in any period have shown an increase for both males and females since 1920–22. The total number of expected deaths for both sexes has increased nearly six-fold, from 85 to 503 for males and from 69 to 408 for females. The total of 85 male deaths expected on the experience of 1920–22 would have been reached by age 59 years 5 months on the 1930–32 rates, by age 30 on the 1950–52 rates and by age 26 years 6 months on the 1960 rates. Similarly for females, the total of 69 expected deaths from the rates current in 1920–22 would be reached by age 31 years on the 1960 experience.

Compared with a six-fold overall increase, the expected male deaths at ages 60 and over for the 1960 rates were more than 11 times those for 1920–22, while for females there was an eleven-fold increase. Part of these increases is probably due to improved diagnosis so that it is difficult to say how far they reflect a change in the prevalence of these conditions.*

Table CIII—*continued*

(F) Cerebral haemorrhage, embolism and thrombosis

Age-group			Males				Females			
			1960	1950–52	1938	1930–32	1960	1950–52	1938	1930–32
0–	..	..	4	4	0	0	3	2	0	0
1–	..	..	6	5	0	0	5	3	0	0
5–	..	..	9	7	1	0	6	4	0	0
10–	..	..	13	11	2	1	9	7	0	0
15–	..	..	19	16	3	2	12	10	1	1
20–	..	..	26	24	5	5	21	17	4	3
25–	..	..	34	36	9	9	33	26	7	7
30–	..	..	54	54	20	18	53	45	16	17
35–	..	..	97	85	39	42	98	81	41	38
40–	..	..	171	153	88	95	175	155	93	91
45–	..	..	311	286	199	212	311	329	214	232
50–	..	..	601	573	455	440	584	681	502	512
55–	..	..	1,114	1,094	931	899	1,053	1,268	981	978
60–	..	..	2,051	2,053	1,735	1,705	1,906	2,245	1,861	1,754
65–	..	..	3,486	3,534	3,034	2,995	3,349	3,871	3,169	3,029
70–	..	..	5,510	5,590	4,786	4,667	5,738	6,386	5,079	4,803
75–	..	..	7,754	7,773	6,565	6,342	9,140	9,569	7,324	6,862
80–	..	..	9,672	9,440	7,776	7,426	12,673	12,572	9,112	8,495
85 and over	..		11,034	10,457	8,384	8,017	16,495	14,989	10,682	9,664

Table CIII(F) shows that, on the basis of the 1960 death rates for cerebral haemorrhage, thrombosis and embolism, among 100,000 males born 11,034 deaths would be expected from this cause, compared with 16,495 among the same number of female births. In each of the periods considered, the expected female deaths are in excess of the male. Based on the 1930–32 death rates from this cause, the total female deaths would be 21 per cent in excess of the male, whereas on the basis of rates current in 1960, the excess of female over male deaths would be 49 per cent.

The total expected deaths increased at successive intervals from 1930–32 to 1960 for both males and females. Taking the number of deaths expected in 1930–32 as 100 per cent, the male totals would be 105 per cent in 1938, 130 per

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* For a fuller discussion on this point see:
  Court Brown W. M. and Doll, R. (1959). *Brit. med. J.*, vol. I, p. 1067, and
  Court Brown W. M. and Doll, R. (1961). *Brit. med. J.*, vol. I, pp. 982–983.

cent in 1950–52 and 138 per cent in 1960. The female totals for the same periods would be 100 per cent, 111, 155 and finally 171 per cent in 1960.

Although less female deaths were expected from the 1950–52 death rates than from those for 1960, they tended to occur earlier. On the 1950–52 rates, there would be 9,414 deaths between ages 45 and 80, compared with 8,965 if the 1960 rates were applied. The same is true of male deaths between ages 65 and 80 (see also Diagram 6(E)).

In each period shown in the table, half the female deaths would be expected to occur after age 75, whereas in the three earlier periods half the male deaths would occur before age 70 was reached, and only on the basis of the 1960 rates would half the expected deaths take place after age 75.

Diagram 6(E)

CEREBRAL HAEMORRHAGE, EMBOLISM and THROMBOSIS
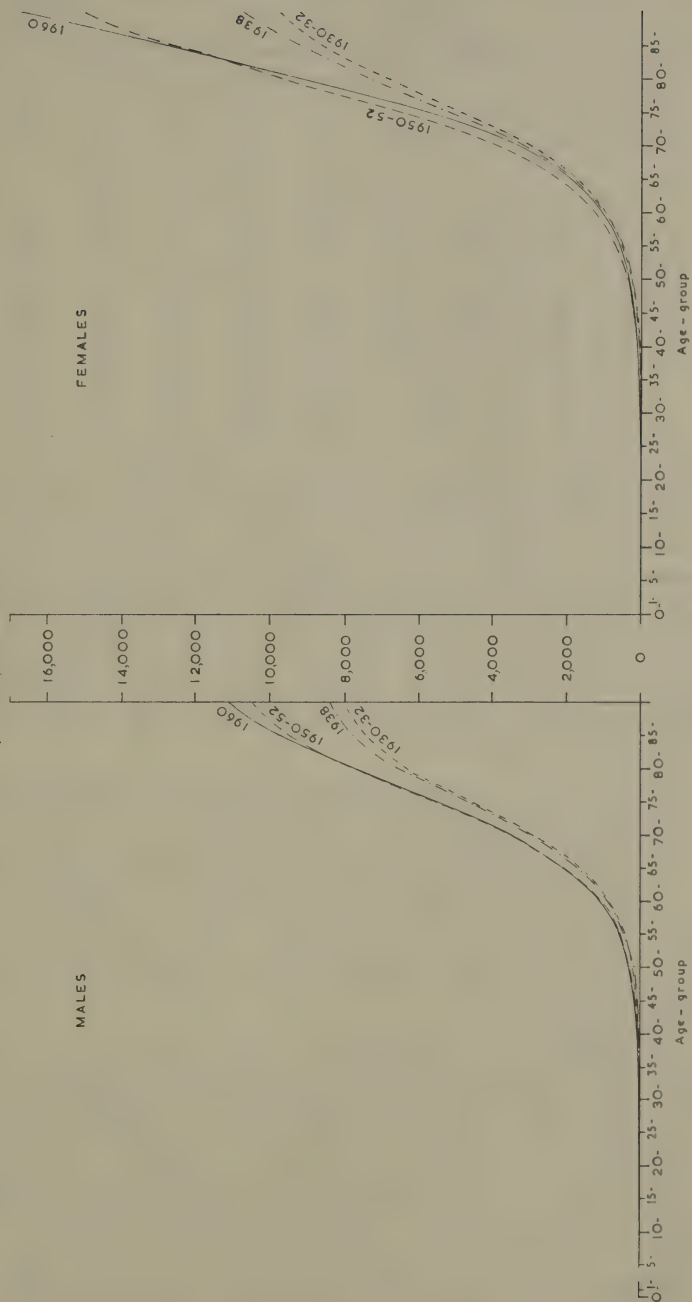
Table CIII—*continued*

(G) Ulcer of stomach and duodenum

Age-group	Males					Females				
	1960	1950–52	1938	1930–32	1920–22	1960	1950–52	1938	1930–32	1920–22
0–	0	1	0	1	1	1	1	0	1	1
1–	0	1	0	1	1	1	1	0	1	1
5–	0	1	0	1	2	1	1	0	1	2
10–	0	1	0	1	2	1	1	0	1	4
15–	0	3	4	6	8	1	2	2	4	10
20–	2	9	15	19	22	2	3	4	7	18
25–	5	17	31	46	43	3	4	7	13	29
30–	15	32	60	90	77	4	7	12	22	46
35–	26	59	125	155	129	9	12	21	33	67
40–	46	112	206	254	192	13	21	35	53	95
45–	76	198	321	391	260	21	34	59	88	128
50–	125	327	502	532	334	36	54	90	130	161
55–	224	493	690	677	406	55	83	130	175	199
60–	351	708	868	814	483	90	132	175	224	235
65–	531	958	1,009	933	547	146	200	227	276	266
70–	746	1,179	1,129	1,029	589	230	280	285	318	292
75–	938	1,344	1,207	1,086	614	348	370	336	353	313
80–	1,089	1,432	1,250	1,116	621	482	444	367	373	324
85 and over ..	1,183	1,475	1,272	1,128	625	597	494	382	386	328

Table CIII(G) and Diagram 6(F) show that the effect of the changing death rates from ulcers of stomach and duodenum over the last 40 years has been a decrease in expectation of death from this cause in younger age-groups, accompanied by an increase in expected deaths in the older age-groups. For males, the total expected deaths rose from 625 on the basis of the death rates in 1920–22, to 1,475 on the 1950–52 rates; this was an increase of 136 per cent. With the 1960 rates, 1,183 deaths would be expected, a figure only 89 per cent above the level for 1920–22. Female deaths would be expected to increase steadily, from 328 on rates current in 1920–22, to 597 on the 1960 rates; this is an increase of 82 per cent.

At any age up to 70, the male deaths based on the 1960 rates were less than those at corresponding ages for the other periods shown. For example, 125 male deaths would be expected on the 1960 rates before reaching age 55, compared with 327 for 1950–52, 502 for 1938, 532 for 1930–32 and 334 for 1920–22. This was true also for expected female deaths up to age 75. At ages over 70, 652 male deaths would be expected on rates current in 1960, compared with 517, 263, 195 and 78 for the other periods respectively. For females, 367 deaths would be expected at ages over 75, compared with only 214, 97, 68 and 36 for the other periods back to 1920–22.

Table CIII(H) and Diagram 6(G) show that with the rates current during the periods shown, there would have been a progressive increase in the number of deaths from cancer of the breast in females, from 2,069 among 100,000 births, based on the rates for 1920–22, to 3,068 for the rates in 1960. This is an increase of 48 per cent. The increase in the deaths expected to occur before reaching age 45 was 25 per cent for 1960 compared with 1920–22. The main increases occurred at age 65, and over. The expected deaths at this end of the age range were 987 for 1920–22, increasing through 1,221, 1,449 and 1,469 in the intervening periods shown, to 1,645 for 1960. These numbers, expressed as percentages of the deaths based on the 1920–22 death rates, were 124, 147, 149 and 167 respectively.

Diagram 6(F)

ULCER OF STOMACH AND DUODENUM

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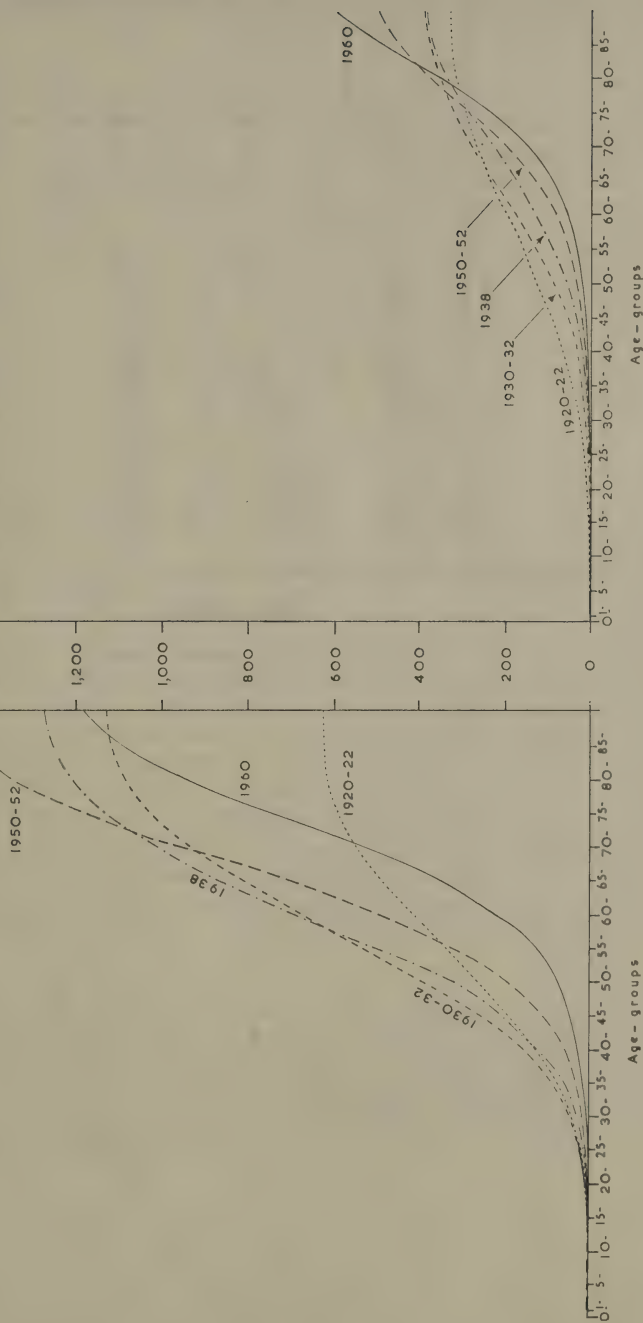
Table CIII—*continued*

(H) Carcinoma of the breast, females

Age-group			1960	1950–52	1938	1930–32	1920–22
0–	..	..	0	0	0	0	0
1–	..	..	0	0	0	0	0
5–	..	..	0	0	0	0	0
10–	..	..	0	0	0	0	0
15–	..	..	0	0	0	0	0
20–	..	..	2	1	1	0	0
25–	..	..	9	7	7	3	3
30–	..	..	34	30	26	23	20
35–	..	..	98	97	77	78	72
40–	..	..	223	237	195	195	179
45–	..	..	445	445	391	386	348
50–	..	..	750	699	652	642	561
55–	..	..	1,062	1,007	963	941	816
60–	..	..	1,423	1,352	1,311	1,260	1,082
65–	..	..	1,798	1,711	1,659	1,578	1,324
70–	..	..	2,179	2,074	1,987	1,874	1,575
75–	..	..	2,547	2,405	2,307	2,142	1,805
80–	..	..	2,816	2,643	2,560	2,343	1,957
85 and over		..	3,068	2,821	2,760	2,481	2,069

Diagram 6(G)

CARCINOMA OF THE BREAST, FEMALES
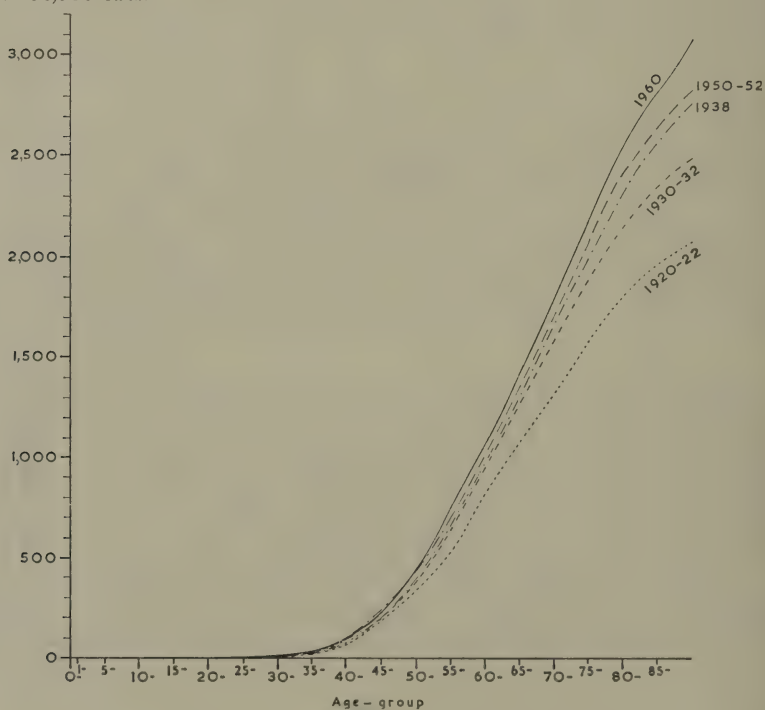
The total of 2,069 deaths expected on the basis of the rates for 1920–22 would occur by age 78 years 8 months on the 1930–32 rates, by 74 years 11 months on the 1950–52 rates and by 73 years 7 months on the basis of the 1960 rates.

Table CIII—*continued*

(I) Malignant neoplasm of prostate and other diseases of prostate

Age-group	Carcinoma of the prostate				Diseases of the prostate			
	1960	1950–52	1938	1930–32	1960	1950–52	1938	1930–32
0–	0	0	0	0	0	0	0	0
1–	0	0	0	0	0	0	0	0
5–	0	0	0	0	0	0	0	0
10–	0	0	0	0	0	0	0	0
15–	0	0	0	0	0	0	0	0
20–	0	0	0	0	0	0	0	0
25–	0	0	0	0	0	0	1	0
30–	0	0	0	0	0	0	2	0
35–	0	0	1	1	0	0	2	1
40–	1	1	5	3	0	0	3	2
45–	5	5	9	8	1	2	7	6
50–	15	18	25	23	5	10	21	23
55–	49	57	69	57	21	41	75	79
60–	146	150	163	142	67	124	212	226
65–	338	343	331	289	170	330	513	531
70–	651	616	559	470	390	693	981	981
75–	1,010	919	762	617	707	1,166	1,562	1,506
80–	1,288	1,106	865	693	1,067	1,607	2,026	1,884
85 and over ..	1,468	1,192	910	727	1,367	1,927	2,299	2,097

In Table CIII(I) the results of applying current death rates to 100,000 persons born are shown for cancer of the prostate and other diseases of the prostate. It is difficult to trace these rates back with continuity of diagnosis beyond 1930. The total expected deaths from cancer has increased from 727 on the basis of the rates for 1930–32, to 1,468 for the 1960 rates, an increase of 102 per cent. Over the same period, after an initial increase in 1938 compared with 1930–32 of 10 per cent, the expected deaths from diseases of the prostate have decreased to 1,367, which is only 65 per cent of the expected deaths for 1930–32. When the expected deaths for the two causes are added together, the results vary little from one period to the next: 1960, 2,835; 1950–52, 3,119; 1938, 3,209; 1930–32, 2,824.

From Diagram 6(H) it appears that the chief increases in expected deaths from cancer of the prostate would occur at ages over 75, and there would, in fact, be 257 expected deaths at these ages on the basis of the 1930–32 rates, but 817 on the rates current in 1960. For expected deaths from diseases of the prostate, the decrease would be greatest in the age-group 65 and over, as may be seen from Diagram 6(H).

Diagram 6(H)

MALIGNANT NEOPLASM OF PROSTATE AND OTHER DISEASES OF PROSTATE

Expected total deaths
per 100,000 births

OTHER DISEASES

CARCINOMA

1960

1950-52

1930-32
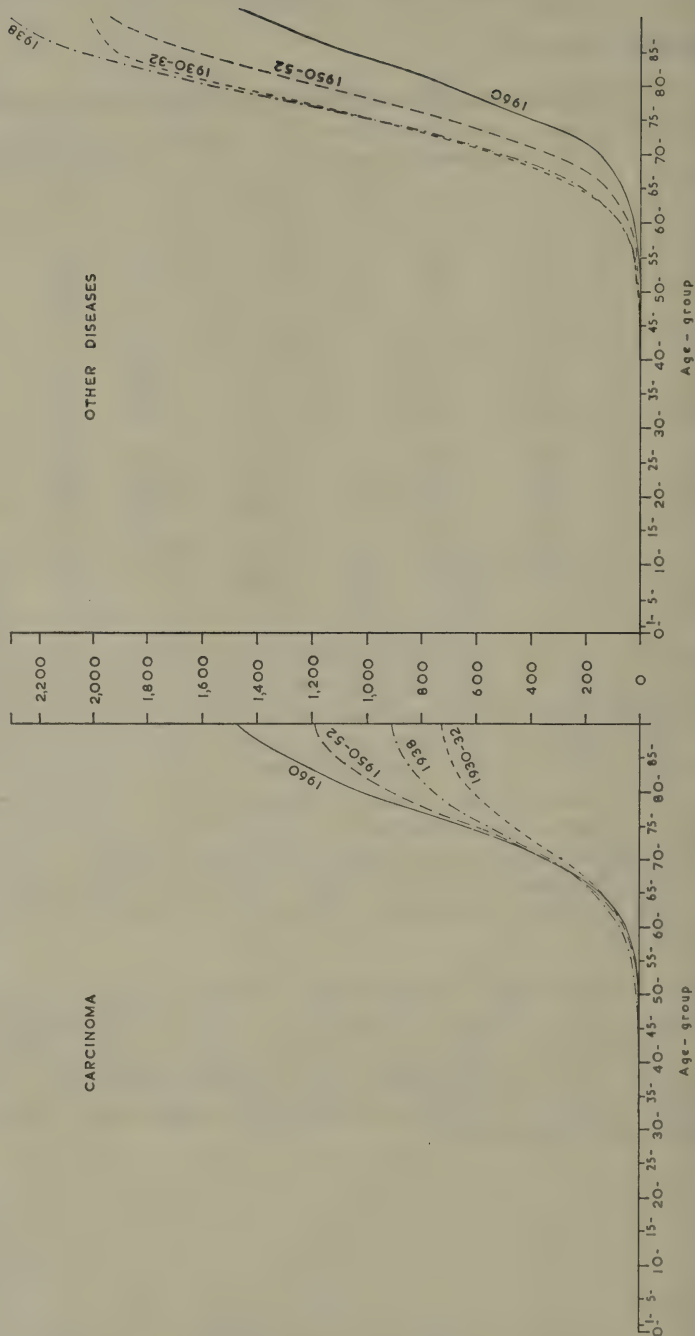
1938

Age-group

Table CIII—*continued*

(J) Suicide

Age-group	Males					Females				
	1960	1950–52	1938	1930–32	1920–22	1960	1950–52	1938	1930–32	1920–22
0–	0	0	0	0	0	0	0	0	0	0
1–	0	0	0	0	0	0	0	0	0	0
5–	0	0	0	0	0	0	0	0	0	0
10–	1	1	1	1	2	1	0	1	0	1
15–	16	15	14	15	13	8	5	8	11	11
20–	58	41	49	57	40	26	14	26	31	27
25–	107	74	98	111	73	51	30	54	61	43
30–	168	112	157	170	119	80	48	87	96	67
35–	232	160	234	245	185	117	78	129	134	94
40–	298	225	314	349	266	163	114	177	178	128
45–	385	307	427	480	370	225	167	241	235	170
50–	478	411	557	642	492	299	227	311	295	210
55–	600	530	716	822	622	378	296	377	354	249
60–	719	649	886	990	762	455	358	442	411	287
65–	817	768	1,017	1,130	878	532	418	487	453	311
70–	901	860	1,116	1,226	958	588	466	518	482	329
75–	960	927	1,186	1,282	1,004	622	494	539	498	338
80–	997	960	1,216	1,309	1,022	643	507	547	503	342
85 and over	1,012	969	1,226	1,317	1,029	650	511	551	506	344

Table CIII(J) and Diagram 6(I) show that the pattern of expected deaths due to suicide is less consistent than with most of the other conditions which have been examined. For males there was an increase of 28 per cent, from 1,029 deaths expected on the basis of the rates for 1920–22, to 1,317 for 1930–32. The deaths then decreased to 1,226, which is only 19 per cent above the number expected for 1920–22, and there was a further decline to 969 for 1950–52; this represents 94 per cent of the level of 1920–22. In 1960, however, an increase in the rates resulted in 1,012 expected deaths, which is 98 per cent of the number for 1920–22.

At the same time, expected female deaths increased from 344 for the 1920–22 rate, to 506 for 1930–32, an increase of 47 per cent, and on the 1938 rates there was a further rise to 60 per cent above the 1920–22 level. On the 1950–52 basis, the expected total decreased to 511, but on the 1960 experience rose to 650, which is 89 per cent more than for 1920–22.

Although the total expected female deaths for 1950–52 exceed those for 1920–22, at ages under 50 there were fewer expected deaths in the 1950–52 group. Similarly, between ages 25 and 55, the expected deaths for 1960 were less than those for 1938. The female deaths have risen, over the period of 40 years under consideration, relatively to the male deaths. Whereas with rates current in 1920–22, there was roughly 1 female to 3 male suicides, by 1960 there were 2 female to 3 male deaths from this cause.

Conclusion

The effects of changes in the death rates since 1920–22 on the number of persons born in a given year who, if subject to the death rates current in that year, would expect to die of a specified cause of death, have been examined. Of the eleven selected causes which have been considered, there has been a decrease in expected deaths for both sexes from tuberculosis, all forms, respiratory tuberculosis and pneumonia. For bronchitis, chronic and

Diagram 6(I)

SUICIDE

Expected total deaths per 100,000 births

MALES
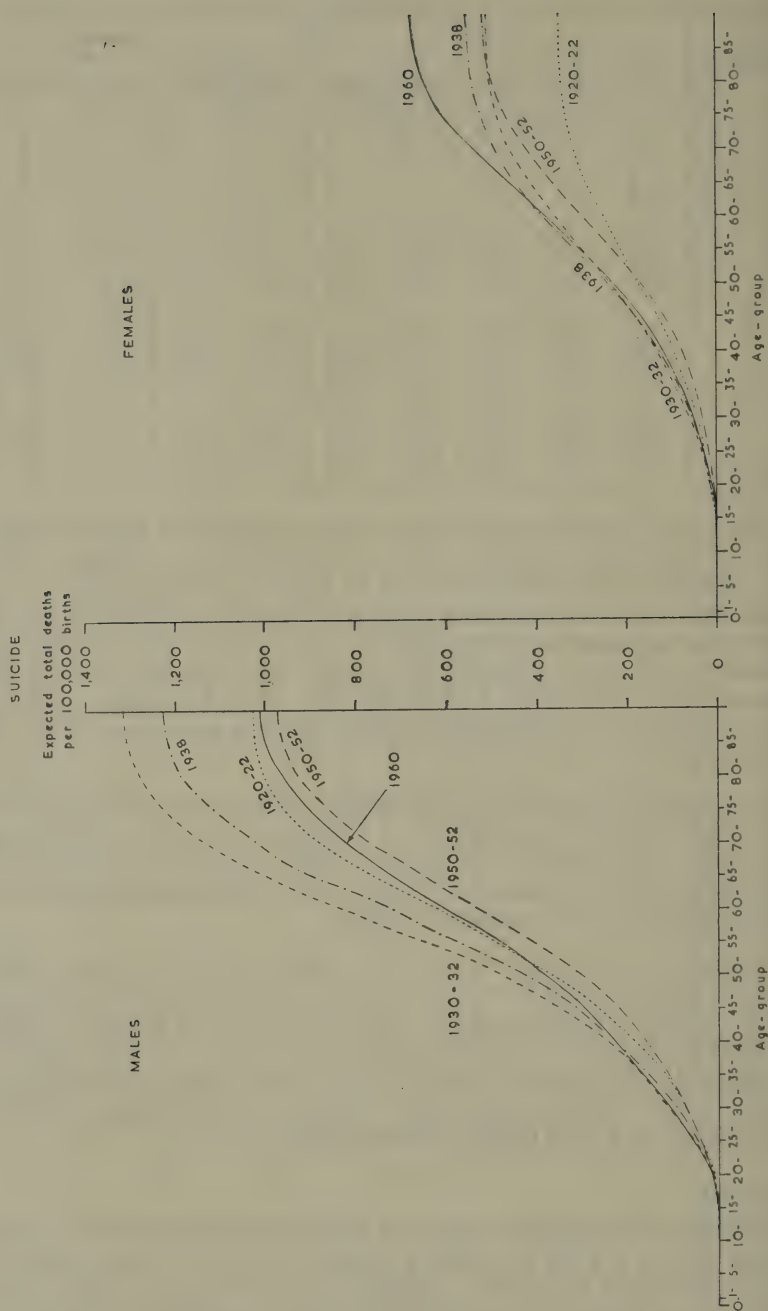
FEMALES

unspecified, a saving in female lives has been accompanied by a loss in male lives. In the case of suicide there has been an increase in expectation of female deaths and a small reduction in expected male deaths. Increased expectancies of death are also shown for cancer of the breast in females, and for cancer of the prostate. The latter has been roughly balanced by a decrease in deaths due to diseases of the prostate generally. Increased expectancy of death is shown for leukaemia and aleukaemia, ulcers of stomach and duodenum, and cerebral haemorrhage, embolism and thrombosis.

The tables produced by this method are inter-dependent. If fewer deaths appear under one cause, they must appear under some other cause, although not necessarily one which has been selected for study here. This complementary pattern need not, however, be incompatible with a general shift of deaths to the older ages for all causes. In addition, the tables contain a mixture of generations so that an increase in the deaths from one particular condition may be due to some generations possessing higher susceptibility to that condition.

So far as the eleven selected causes of death are concerned, the total effects may be summarised as follows:

Disease			Expectancy of dying from this cause		
Tuberculosis, all forms	..	..	1920–22;	males 1 in 14;	females 1 in 18
			1960	males 1 in 115;	females 1 in 328
Tuberculosis, respiratory	..	..	1920–22;	males 1 in 17;	females 1 in 23
			1960	males 1 in 123;	females 1 in 403
Pneumonia	.. .. ..	..	1920–22;	males 1 in 14;	females 1 in 18
			1960	males 1 in 22;	females 1 in 19
Bronchitis	.. .. ..	..	1930–32;	males 1 in 25;	females 1 in 25
			1960	males 1 in 15;	females 1 in 40
Leukaemia and aleukaemia	..	..	1920–22;	males 1 in 1,176;	females 1 in 1,449
			1960	males 1 in 199;	females 1 in 245
Cerebral haemorrhage and thrombosis			1930–32;	males 1 in 12;	females 1 in 10
			1960	males 1 in 9;	females 1 in 6
Ulcer of stomach and duodenum		..	1920–22;	males 1 in 160;	females 1 in 305
			1960	males 1 in 85;	females 1 in 168
Suicide ..	.. .. ..	..	1920–22;	males 1 in 97;	females 1 in 291
			1960	males 1 in 99;	females 1 in 154
Cancer of breast	.. ..	..	1920–22;		females 1 in 48
			1960		females 1 in 33
Cancer of prostate	.. ..	..	1930–32;	males 1 in 138	
			1960	males 1 in 68	
Diseases of prostate	.. ..	..	1930–32;	males 1 in 48	
			1960	males 1 in 73	

Appendix. Form of calculation (Respiratory tuberculosis, females, 1930–32).

Age-group	Deaths assigned to cause	Deaths from all causes	Ratio of $\dfrac{\text{Deaths cause}}{\text{Deaths all causes}}$	Deaths (life table d_x)	d_x multiplied by ratio	Cumulative total deaths
0– ..	116	50,786	·002284	5,455	12	12
1– ..	306	24,040	·01273	2,521	32	44
5– ..	279	10,013	·02786	942	26	70

MISCELLANEOUS

Corrected notifications and deaths assigned to certain infectious diseases

Some infectious diseases which represent major public health problems in some parts of the world are seldom, if ever, found in England and Wales. For instance, 1948 was the last year in which a case of cholera was notified and 1956 the last year in which a case of typhus fever was notified. There are other infectious diseases, for example, relapsing fever, notifications of which are confined to an odd case or two. Occasionally some non-notifiable infections are found on death certificates. Numbers of corrected notifications and deaths for a few of these uncommon infectious diseases are shown in Table CIV, together with administrative area of assignment and the county in which the area is situated.

One case of relapsing fever, not fatal, was notified in Lancashire. In the 10 years 1951–60 there were 8 cases of this disease notified, none of them fatal. There was one smallpox notification in 1960 in Westminster, not fatal.

One male and one female death were classified to actinomycosis, a condition responsible for 76 deaths during 1950–60. There were no deaths from brucellosis in 1960.

Table CIV.   Corrected notifications and deaths assigned to a few uncommon infectious diseases in England and Wales, 1960

		Notifications		
Disease (and ICD No.)		Administrative area of assignment	County	Number of cases
Cholera (043) ..	M	—	—	—
	F	—	—	—
Plague (058) ..	M	—	—	—
	F	—	—	—
Relapsing fever (071)	M	—	—	—
	F	Worsley U.D.	Lancashire	1
Smallpox (084) ..	M	Westminster Met. B.	London A.C.	1
	F	—	—	—
Typhus fever (100–108)	M	—	—	—
	F	—	—	—
Malaria (contracted in England and Wales) (110–117)	M	—	—	—
	F	—	—	—

Table CIV—*continued*

Deaths

Disease (and ICD No.)		Administrative area of assignment	County	Date of death
Cholera (043) ..	M	—	—	—
	F	—	—	—
Brucellosis (044) ..	M	—	—	—
	F	—	—	—
Diphtheria (055) ..	M	Huyton-with-Roby U.D.	Lancashire	16th February
	M	Derby C.B.	Derbyshire	7th December
	F	Walthamstow M.B.	Essex	29th January
	F	Derby C.B.	Derbyshire	1st September
	F	Liverpool C.B.	Lancashire	1st October
Plague (058) ..	M	—	—	—
	F	—	—	—
Anthrax (062) ..	M	Ledbury R.D.	Herefordshire	3rd November
	F	—	—	—
Relapsing fever (071)	M	—	—	—
	F	—	—	—
Smallpox (084) ..	M	—	—	—
	F	—	—	—
Rabies (094) ..	M	—	—	—
	F	—	—	—
Typhus and other rickettsial diseases (100–108)	M	Halifax C.B.	Yorkshire, West Riding	2nd September
	F	—	—	—
Actinomycosis (132)	M	Southport C.B.	Lancashire	28th December
	F	Stockport C.B.	Cheshire	27th June

Two male and three female deaths were assigned to diphtheria in 1960, and there were 49 corrected notifications, of which 24 were of males and 25 of females. The areas of assignment are shown in Table CV. Of these cases, 21 (43 per cent) were notified in the Greater London Conurbation.

Table CV. Corrected notifications of diphtheria, 1960, England and Wales

Administrative area of assignment	County	Number of cases	
		M	F
High Wycombe M.B.	Buckinghamshire	1	
Aylesbury R.D.	Buckinghamshire		4
Wycombe R.D.	Buckinghamshire	1	2
Chester R.D.	Cheshire		1
Derby C.B.	Derbyshire	3	3
Plymouth C.B.	Devon		1
Bridport M.B.	Dorset	..	1
Walthamstow M.B.	Essex	3	2
Liverpool C.B.	Lancashire	1	5
Huyton-with-Roby U.D.	Lancashire	2	1
Camberwell Met. B.	London A.C.	5	3
Hampstead Met. B.	London A.C.	1	
Lambeth Met. B.	London A.C.	2	1
Southwark Met. B.	London A.C.	2	1
Stepney Met. B.	London A.C.	1	
St. Faith's and Aylsham R.D.	Norfolk	1	
Brierley Hill U.D.	Staffordshire	1	

Deaths from encephalitis certified as secondary to infectious disease

Table CVI shows numbers and sex-age distribution of deaths in which an infectious disease was the underlying cause, but where encephalitis was also mentioned on the certificate of cause of death, either in Part I as a complication of the infectious illness or in Part II as a condition contributing to the death. The total numbers of deaths assigned to the infectious diseases in question are shown for comparison.

Table CVI. Deaths from encephalitis certified as secondary to infectious disease, by underlying cause, sex and age, 1960, England and Wales

ICD No.	Cause of death	Sex	All deaths	Deaths from encephalitis secondary to infectious diseases											
				All ages	0–	1–	2–	3–	4–	5–9	10–14	15–24	25–44	45–64	65 and over
056	Whooping cough	M	20	1	—	—	—	—	1	—	—	—	—	—	—
		F	17	1	—	—	—	—	—	—	—	—	—	—	1
080	Acute poliomyelitis	M	19	1	—	—	—	—	—	—	—	—	—	1	—
		F	4	—	—	—	—	—	—	—	—	—	—	—	—
085	Measles	M	13	2	1	1	—	—	—	—	—	—	—	—	—
		F	18	5	1	1	2	1	—	—	—	—	—	—	—
087	Chickenpox	M	8	3	—	—	1	—	1	1	—	—	—	—	—
		F	11	2	1	—	1	—	—	—	—	—	—	—	—
088	Herpes zoster	M	14	1	—	—	—	—	—	1	—	—	—	—	—
		F	34	2	—	—	—	1	—	1	—	—	—	—	—
089	Mumps	M	4	1	—	—	—	—	—	1	—	—	—	—	—
		F	6	2	—	—	—	—	—	2	—	—	—	—	—
096	Other diseases attributable to viruses	M	13	1	—	—	—	—	—	—	—	—	—	1	—
		F	11	—	—	—	—	—	—	—	—	—	—	—	—
344	Late effects of intracranial abscess or pyogenic infection	M	42	2	—	—	—	—	—	—	—	—	1	1	—
		F	42	1	—	—	—	—	—	—	—	1	—	—	—
480	Influenza with pneumonia	M	330	—	—	—	—	—	—	—	—	—	—	—	—
		F	322	3	—	—	—	—	—	—	1	2	—	—	—
483	Influenza with nervous manifestations, but without digestive or respiratory symptoms	M	1	1	—	—	—	—	—	—	—	—	—	—	1
		F	3	2	—	—	—	1	—	1	—	—	—	—	—
	Total	M	464	13	1	1	1	—	2	3	—	—	1	3	1
		F	468	18	2	1	3	3	—	4	1	3	—	—	1

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Tetanus

Deaths from tetanus are assigned to ICD No. 061 when the condition follows vaccination or a slight injury such as a scratch; if the injury is more serious the death is assigned to the injury. In 1960 there were 18 deaths, 15 male and 3 female, assigned to tetanus, and a further 14 deaths, 5 male and 9 female, where tetanus was mentioned in the statement of cause of death but which were assigned to other causes.

Of the 18 deaths assigned to tetanus in 1960, 8 occurred in children under 15 years of age. Of the 14 deaths involving tetanus but assigned to another underlying cause, 2 were of children under 15 years of age.

Details of all these deaths are given in Table CVII.

Table CVII. Deaths due to tetanus, by sex and age, showing cause of tetanus, 1960, England and Wales

Age	Sex	Cause of tetanus
		(a) assigned to tetanus (ICD No. 061)
3 years	F	Small cut below knee
5 years	M	Small puncture on knee from cane thrown by another child
8 years	M	Tetanus*
9 years	M	Cut right hand by falling at play
10 years	M	Puncture wound in foot caused by a rusty nail
11 years	M	Tetanus*
12 years	M	Tetanus*
14 years	M	Fell from bicycle and cut knee
22 years	F	Splinter wound sustained while dusting
23 years	M	Entry wound not discovered but old scratches on palm of hands
50 years	M	Tetanus*
51 years	M	Tetanus*
56 years	M	Tetanus*
60 years	M	Nipped finger in jammed conveyor belt
66 years	M	Trod on nail in garden
75 years	M	Trod on nail in garden
77 years	F	Tetanus*
81 years	M	Tetanus*
		(b) assigned elsewhere
21 months	M	Burn to left wrist, fell against fire
8 years	F	Compound fracture of forearm, fell from wooden box
20 years	M	Following extraction of teeth
36 years	M	Crush injury of left foot sustained in fall of a concrete lintel
44 years	M	Left great toe of foot trapped in machine at work
50 years	F	Carcinoma of ovary
52 years	M	Frost bite of the feet, amputation
56 years	F	Varicose ulceration
57 years	F	Infection of wound in forefinger. Finger wounded on child's spade.
59 years	F	Lacerated wound of left leg caused by fall in garden
66 years	F	Large cut on leg, slipped and fell on disused shed door with rusty appendages
69 years	F	Varicose ulcer
77 years	F	Varicose ulcer
87 years	F	Cut in the left index finger

* No cause stated.

Deaths following vaccination or other prophylactic inoculation

This section gives details of deaths classified to ICD Nos. E940–E942, vaccinia, postvaccinal encephalitis, and other complications of smallpox vaccination, and to ICD Nos. E943, E944, post-immunization jaundice and hepatitis, and other complications of prophylactic inoculation.

In 1960 there were five deaths assigned to complications of vaccination against smallpox:

(1) Male aged 4 months, certified as generalised vaccinia following vaccination.

(2) Male aged 4 months, certified as encephalitis, vaccination against smallpox having taken place eleven days before death.

(3) Male aged 10 months, certified as I(a) Acute Encephalitis, II Convulsions; further investigation revealed that successful vaccination against smallpox had taken place eleven days before death.

(4) Male aged 5 months, certified as postvaccinal encephalitis with severe reaction to smallpox vaccination.

(5) Female aged 40 years, certified as acute cerebral oedema due to postvaccinal encephalitis.

There were two deaths assigned to complications of other prophylactic inoculations, one following injection of anti-tetanus toxin:

(1) Female aged 23 years, certified as pyelonephritis and bronchopneumonia due to encephalomyelitis caused by an injection of anti-tetanus serum following a fracture of the shaft of the left femur.

(2) Male aged 40 years, certified as anaphylactic shock due to anti-polio injection (second injection).

Deaths by cause, sex and age connected with the administration of anaesthetics

Table CVIII shows that there were 344 deaths in 1960 in which there was mention of the administration of anaesthetics on the death certificate. This shows a considerable reduction from the 414 deaths in 1959.

Of the 344 deaths in 1960, 163 (47 per cent) were of persons aged 65 and over. Of the 344 deaths, 71 (21 per cent) were classified to malignant neoplasms and a further 35 (10 per cent) to intestinal obstruction and hernia. Note should be made that mention of anaesthetics does not necessarily mean that they played any large part in the train of events leading to death or that the deaths mentioned include all those in which anaesthetics played a part.

Table CVIII. Deaths by cause, sex and age, connected with the administration of anaesthetics, 1960, England and Wales

ICD No.	Cause of death	All ages M	All ages F	0– M	0– F	5– M	5– F	15– M	15– F	25– M	25– F	35– M	35– F	45– M	45– F	55– M	55– F	65 and over M	65 and over F
001–008	Tuberculosis of the respiratory system	—	2	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—
020–029	Syphilis and its sequelae	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
140–205	Malignant neoplasms including neoplasms of lymphatic and haematopoietic tissues	37	34	—	—	1	—	—	—	1	—	—	—	7	5	10	9	18	18
210–239	Benign neoplasms and neoplasms of unspecified nature	1	7	—	—	—	—	—	—	1	2	—	—	1	1	—	—	—	2
250–254	Diseases of thyroid gland	—	1	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	1
260	Diabetes mellitus	2	2	—	—	—	—	—	—	1	2	—	2	1	—	—	1	—	—
330–334	Vascular lesions affecting central nervous system	3	1	—	—	1	—	—	—	1	—	—	—	—	1	1	—	—	—
370–389	Diseases of eye	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
410–416	Chronic rheumatic heart disease	2	6	—	—	1	2	—	—	—	—	—	—	—	—	1	2	2	2
420–422	Arteriosclerotic and degenerative heart disease	2	9	—	—	—	1	—	—	—	—	—	2	1	3	1	1	—	1
440–443	Hypertension with heart disease	13	5	—	—	1	—	—	—	1	—	—	—	1	—	3	1	9	4
444–447	Hypertension without mention of heart	—	1	—	—	—	—	—	—	—	—	—	3	—	—	—	1	—	—
450–456	Diseases of arteries	1	2	—	—	3	2	1	—	—	1	1	1	1	—	1	—	2	1
500–502	Bronchitis	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1
510	Hypertrophy of tonsils and adenoids	3	3	—	1	1	1	—	—	—	—	—	—	—	—	1	—	—	—
530–535	Diseases of teeth and supporting structures	3	5	—	—	—	—	—	—	—	—	1	—	—	—	3	—	1	—
540, 541	Ulcer of stomach and duodenum	15	6	—	—	—	—	—	—	—	1	1	—	2	2	6	1	7	5
550–553	Appendicitis	2	2	—	—	—	1	—	—	—	—	1	—	2	—	—	—	—	1
560, 561, 570	Intestinal obstruction and hernia	18	17	2	1	1	—	—	—	—	—	—	2	2	1	8	3	6	10
543, 571, 572	Gastritis, duodenitis, enteritis, and colitis, except diarrhoea of the newborn	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
584, 585	Cholelithiasis and cholecystitis	2	8	—	—	—	2	—	—	—	—	—	—	—	2	—	—	2	4
610	Hyperplasia of prostate	18	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	17	—
640–689	Deliveries and complications of pregnancy, childbirth, and the puerperium	—	5	—	—	—	—	—	1	—	5	—	—	—	—	—	—	—	—
720–749	Diseases of the bones and organs of movement	—	7	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	5
750–759	Congenital malformations	1	3	2	1	2	—	—	1	—	—	—	—	1	—	1	—	—	—
760–769	Birth injuries, asphyxia, and infections of newborn	5	7	2	3	1	1	—	1	—	1	—	—	—	4	1	3	1	—
Rem. 001–795	All other diseases	17	23	2	—	—	—	—	—	—	—	1	2	1	—	5	5	9	9
E810–E835	Motor vehicle accidents	2	2	—	—	1	1	1	1	—	—	—	—	1	—	1	1	1	1
E900–E904	Accidental falls	7	18	2	—	—	1	—	—	—	—	—	—	1	—	1	3	4	15
Rem. E800–E962	All other accidents	2	2	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1
	All causes	165	179	8	6	9	14	2	4	3	11	3	15	18	18	40	30	82	81

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Therapeutic misadventures

According to the International Statistical Classification, Nos. E950–E959, which deal with therapeutic misadventures and late complications of therapeutic procedures, are not to be used for primary death classification if the condition for which the treatment was given is known. Accordingly, deaths from therapeutic misadventure can be analysed only by secondary tabulation.

It is, however, necessary to define what is meant by a therapeutic misadventure, as opposed to any complication arising after treatment. For example, pulmonary embolism following an operation is met with on death certificates, but would not be regarded as a therapeutic misadventure. It is not always easy for cause of death coders to decide whether cases should be classed as therapeutic misadventures, and therefore they are instructed to enter in record books the cause of death in any case where treatment has had an untoward result. Even so it is possible that some cases may be missed.

A special analysis by secondary tabulation has been made of all the deaths since 1954 finally judged to have been due to therapeutic misadventures. The cases have been grouped under four headings so as to show the nature of the misadventure, with the following results:

Fatal therapeutic misadventures due to:	Number of deaths			
	1954–56 (annual average)	1957–58 (annual average)	1959	1960
(i) adverse reaction to drug or therapy (Table CIX, page 214)	101	132	136	150
(ii) mistake in drug administered (Table CXI, page 219)	4	2	3	1
(iii) overdose of drug (Table CX, page 218) ..	96	100	127	117
(iv) accident in technique (Table CXII, page 219)	30	54	68	59

Deaths from adverse reaction to drug or therapy have increased from an annual average of 101 during 1954–56 to 150 in 1960, while deaths due to accidents in technique have increased from 30 to 59. Deaths from an overdose of drug have also increased from 96 to 117.

The number of deaths due to the administration of the wrong drug has been very small each year since the analysis began for the 1954–56 period, when there were 4 deaths; for 1960 the number of deaths due to this cause has decreased to one. A high proportion of deaths from an overdose of drugs occurred through the taking of aspirin or some form of barbiturate: one which can be bought freely and the other which is known to be frequently prescribed. It is possible that some of these deaths may be suicides but because of insufficient evidence of intent they could not be so certified. Such considerations should be taken into account in connection with the Tables CIX and CX.

In the following tables the agents are as described by the coroner and no attempt has been made to amalgamate synonymous terms.

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Table CIX. Fatal therapeutic misadventures due to adverse reaction to drug or therapy, 1960, England and Wales

Drug or therapy	No. of cases	Nature of adverse reaction	Terminal complication if different from preceding column
Acetarsol ..	1	Arsenical poisoning	
Adrenalin ..	1	Acute left ventricular failure	
Amidopyrine ..	1	Agranulocytosis	
Amphetamine ..	1	Haemorrhagic encephalopathy	
Antibiotic therapy	1	Acute diarrhoea	Peripheral circulatory failure
Anticoagulant ..	6		
	1	Duodenal ulcer	Acute haemorrhage
	1	Extensive mesenteric haemorrhage	Intestinal obstruction
	1	Haemorrhage from lung, gastro-intestinal tract, kidney	Coronary thrombosis
	1	Parenchymatous gastro-intestinal haemorrhage	
	1	Prolonged bleeding	Heart failure
	1	Spontaneous retroperitoneal haemorrhage	
Aspirin	1	Anaphylactic shock	
Busulphan ..	1	Agranulocytosis	Hypostatic pneumonia
Butozolidin ..	4		
	1	Agranulocytosis and thrombocytopenia	
	3	Aplastic anaemia	Purpuric cerebral haemorrhage (1 case) Cerebral haemorrhage (1 case)
Chlorambucil ..	3		
	2	Agranulocytosis	
	1	Aplastic anaemia	
Chloramphenicol	4	Aplastic anaemia	Septicaemia (1 case)
Chloramphenicol and blood transfusion ..	1	Intestinal haemorrhage	Acute myocardial failure
Chloromycetin ..	3	Aplastic anaemia	Bronchopneumonia (1 case) Pneumonia (1 case)
Chlorpromazine	5		
	1	Agranulocytosis	
	1	Hepatic failure	
	1	Hepatitis	Pyelitis and cystitis
	1	Hypertensive reaction	Cerebral arteriosclerosis
	1	Liver failure	
Corticosteroids ..	8		
	1	Acute adrenal insufficiency	
	1	Acute gastric ulcer	Haematemesis
	1	Acute peptic ulcer	Shock
	1	Adrenal failure	
	1	Adrenal insufficiency	Cardiac failure
	1	Intestinal perforation colon	
	2	Suprarenal failure	Acute bronchitis (1 case)

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Table CIX—*continued*

Drug or therapy	No. of cases	Nature of adverse reaction	Terminal complication if different from preceding column
Cortisone ..	6		
	1	Adrenal insufficiency	
	1	Hypertension	Bronchopneumonia
	1	Osteoporosis	Bronchopneumonia
	2	Perforated duodenal ulcer	Carcinomatosis (1 case)
	1	Pelvic venous thrombosis	Pulmonary embolism
Delta-Butozolidin ..	2		
	1	Agranulocytosis	Bronchopneumonia
	1	Aplastic anaemia and agranulocytosis	Terminal bronchopneumonia
Dindevan ..	3		
	1	Haemorrhage from a gastric ulcer	
	1	Retroperitoneal haematoma	
	1	Cerebral haemorrhage	
Electro-convulsive therapy ..	1	Acute cardiac failure	
Estopen	1	Vagal inhibition	
Heparin ..	1	Retroperitoneal haematoma	
Imferon	1	Anaphylactoid shock	
Insulin	4		
	2	Hypoglycaemia	Left ventricular failure (1 case) Coronary thrombosis (1 case)
	1	Insulin coma	
	1	Shock, cardiac failure	
Largactil ..	1	Hepatic failure	
Largactil, chloramphenicol ..	1	Agranulocytosis	
Mersalyl ..	3		
	1	Acute renal failure	
	1	Acute retention	Uraemia
	1	Ventricular fibrillation	
Mustine therapy	1	Agranulocytosis	Bronchopneumonia
Mysoline ..	1	Aplastic anaemia	
Nardil	1	Hypermania	Exhaustion
Nitrogen mustard therapy ..	1	Agranulocytosis	Pyaemia
Penicillin ..	2		
	1	Anaphylactoid shock	
	1	Anaphylaxis	
Penicillin, aureomycin and Darenthin ..	1	Agranulocytosis	Bronchopneumonia
Phenylbutazone	2	Aplastic anaemia	

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Table CIX—*continued*

Drug or therapy	No. of cases	Nature of adverse reaction	Terminal complication if different from preceding column
Phenylhydrazine	1	Aplastic anaemia	
Phenytoin ..	1	Aplastic anaemia	Agranulocytosis
Potassium perchlorate ..	2	Aplastic anaemia	
Prednisolone ..	1	Perforation in caecum	Diffuse peritonitis
Prednisone ..	1	Peptic ulcer	
Radiation ..	41		
	1	Acute adrenal insufficiency	
	2	Agranulocytosis	Acute tonsillitis (1 case)
	1	Aplastic anaemia	
	1	Chronic pelvic abscess	
	1	Entero-vesical fistula	
	2	Fibrosis of left lung	Congestive cardiac failure (1 case) Pulmonary embolism (1 case)
	1	Fibrosis of lung	Aortic incompetence
	1	Fibrosis of lung and chest wall	Coronary thrombosis
	1	Fibrosis of tongue	Inanition
	1	Hypothyroidism-coma	
	1	Narrowing of ureteric orifices	Acute renal failure
	1	Neutropenia	Aspiration pneumonia
	1	Pelvic abscess	
	1	Pelvic rectal stricture	
	1	Pleural effusion	
	1	Post-irradiation fibrosis	Cardiac failure
	1	Post-irradiation necrosis	Haemorrhage
	1	Post-irradiation vesicovaginal fistula	Paralytic ileus
	1	Post-radiation fibrosis of lung	Cor pulmonale
	2	Post-radiation necrosis of spinal cord	Chronic urinary infection (1 case)
	1	Post-radiation purpura	Cerebral haemorrhage
	3	Pulmonary fibrosis	Acute bronchiolitis (1 case) Bronchopneumonia (1 case) Myocardial degeneration (1 case)
	1	Purulent inflammation and necrosis of the cervix uteri	Pulmonary embolism
	1	Radiation diarrhoea	Paralytic ileus
	1	Radiation fibrosis	Uraemia
	1	Radiation fibrosis of lungs	Cerebral haemorrhage
	1	Radiation necrosis	Uraemia
	1	Radiation necrosis of bladder and rectum	Uraemia and ascending pyelonephritis
	1	Radiation nephritis	
	1	Radiation pneumonitis	Follicular lymphoma
	1	Radio necrosis	Haemorrhage
	1	Radio necrosis of scalp	Cerebral abscess
	1	Radio necrotic ulcer of larynx	Haemorrhage
	1	Renal irradiation damage	Cerebral haemorrhage
	1	Secondary anaemia	Coronary thrombosis
	1	Uraemia	
Radioactive phosphorus ..	1	Aplastic anaemia	

Table CIX—*continued*

Drug or therapy	No. of cases	Nature of adverse reaction	Terminal complication if different from preceding column
Radium	1	Vesicovaginal fistula	Pyelonephritis
Solprin	1	Gastric haemorrhage erosion	
Steroid and aspirin therapy	1	Gastric erosions	Severe haematemesis
Streptomycin, P.A.S. and Isoniazid ..	1	Aplastic anaemia	
Succinylsulpha-thiazole ..	1	Anaphylaxis	
Sulphonamide ..	2 1 1	Agranulocytosis Aplastic anaemia	
TEM	1	Agranulocytosis	Bronchopneumonia
Thiotepa ..	2 1 1	Agranulocytosis Aplastic anaemia	Carcinomatosis
Thorotrast ..	1	Cirrhosis of liver	Massive gastro-intestinal haemorrhage
Transfusion ..	7 1 1 1 2 1 1	Acute tubular necrosis of kidneys Anaphylactic shock Blood transfusion jaundice Homologous serum hepatitis Reaction to albumin transfusion Shock due to transfusion reaction	Renal failure Congestive cardiac failure Acute yellow atrophy of liver (1 case) Cirrhosis of liver (1 case)
Tretamine ..	1	Agranulocytosis	Bronchopneumonia
Triethanolamine	1	Agranulocytosis	
Drug therapy ..	5 1 1 1	Anaphylactic shock Aplastic anaemia Leukaemia and thrombocytopenia	Carcinoma of ovaries
Inhalant ..	1	Mediastinal abscess (Paraffinoma)	Bronchopneumonia
Injection ..	1	Suppurative arthritis	Purulent pericarditis
Total cases..	**150**		

Table CX. Fatal therapeutic misadventures due to overdose of drug, 1960, England and Wales

Drug or combination of drugs	Cases		
	Medically administered	Self administered	Administration not stated
Amphetamine	—	1	—
Amytal	—	2	1
Anadin	—	—	1
Aspirin	—	7	5
Aspirin and alcohol	—	1	—
Aspirin and barbiturate	—	1	1
Barbitone	—	1	—
Barbiturate	—	12	14
Barbiturate and alcohol	—	2	4
Barbiturate and amphetamine	—	1	—
Barbiturate and paraldehyde	—	1	—
Barbituric acid	—	1	—
Bidormal	—	1	—
Carbrital	—	1	3
Carbrital and Sodium Amytal	—	—	1
Carbromal and phenobarbitone	—	—	1
Cephos	—	—	1
Dindevan	—	—	1
Disipal and Stelazine	—	1	—
Insulin	—	—	2
Medamin	—	—	1
Morphia	—	1	1
Nembutal	—	1	2
Paraldehyde	—	1	1
Pentobarbitone	—	—	1
Persomnia	—	5	5
Phenobarbitone	—	1	—
Phenobarbitone and alcohol	—	2	—
Seconal	—	1	—
Sodium amylobarbitone	—	2	—
Sodium Amytal	—	—	5
Sonalgin	—	1	—
Soneryl	—	2	2
Thiophenobarbitone	—	—	1
Tofranil	—	1	1
Tofranil and Tuinal	—	—	1
Tuinal	1	3	4
Not stated	⋮	1	1
Total	1	55	61

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Table CXI. Fatal therapeutic misadventure due to mistake in drug administration, 1960, England and Wales

Therapeutic misadventure associated with	Nature of misadventure
	Medically administered
Tretamine	Wrongly administered, should have been Tetracyn

Table CXII. Fatal therapeutic misadventures due to accident in technique, 1960, England and Wales

Therapeutic misadventure associated with	Nature of misadventure
Air embolism 6 cases	Air embolism following blood transfusion under pressure for hysterectomy for retained placenta. Air embolism occurring whilst under anaesthetic and operation for carcinoma of skull and scalp. Air embolism, recent hysterectomy. Air embolism, recent phlebotomy, ulcerative colitis with ileostomy. Air embolus, tear of hepatic vein, operation for repair of hiatus hernia. Cerebral oedema following air embolism, operation for trigeminal root.
Apparatus	Electrocution during operation for simple cyst of lung.
Infection .. 6 cases	Acute liver failure. Syringe transmitted jaundice. Gas gangrene of abdominal wall, surgical relief of intestinal obstruction, carcinoma of rectum. Gas gangrene of right thigh following injection for heart block. Respiratory paralysis due to tetanus following extraction of teeth. Toxaemia and septicaemia due to non-haemolytic streptococcus due to extravasation of infected urine from injuries to bladder wall which occurred during an operation for repair of inguinal hernia. Uraemia, ascending pyelonephritis, infection of bladder due to catheterisation, following injuries received in road accident.
Instruments 25 cases	
Aortography	Aortic wall damaged during aortography.
Biopsy	Intra peritoneal haemorrhage, biopsy wound in liver, hepatic cirrhosis and primary carcinoma of liver.
Bronchoscopy ..	Haemorrhage due to rupture of an artery in left lung during bronchoscopy for diagnosis of carcinoma in the lung.
Cystoscopy	Renal failure due to bilateral pyelonephritis due to pelvic cellulitis due to perforation of prostatic urethra during cystoscopy.
Gastrectomy	Intra abdominal haemorrhage, associated with gastrectomy. Portal vein divided, repaired later (duodenal ulcer).
Mitral valvotomy ..	Circulatory failure due to haemorrhage from torn auricle.

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Table CXII—*continued*

Therapeutic misadventure associated with	Nature of misadventure
Instruments—*continued*	
Nephrectomy	Severe haemorrhage, injury inferior vena cava, nephrectomy for hypernephroma of right kidney.
Oesophagoscopy ..	Empyema due to rupture of oesophagus, oesophagoscopy for carcinoma of the stomach.
	Empyema thoracic due to perforation of oesophagus during oesophagoscopy.
	Mediastinal haemorrhage due to perforation of oesophagus.
	Mediastinitis, perforated oesophagus.
	Pleural effusion due to perforation of oesophagus.
	Pulmonary collapse due to perforation of the oesophagus.
	Septic peritonitis, perforation of the stomach wall by oesophageal tube.
Pneumonectomy ..	Cardiac failure. Injury to the heart. Pneumonectomy for carcinoma of the lung.
Prostatectomy.. ..	Intestinal obstruction, operation for ruptured urine bladder, due to prostatectomy.
Sigmoidoscopy ..	Trauma from sigmoidoscopy for diverticulitis, bronchopneumonia, paralytic ileus.
Tracheotomy	Spinal compression associated with respiratory obstruction occurring during tracheotomy.
Miscellaneous ..	Acute mediastinitis following accidental perforation of a cancerous growth in the oesophagus.
	Congenital heart disease (pulmonary stenosis). Clot in the right atrium attributable to cardiac catheterisation.
	Insufflation of blood, haemorrhage from ulcer caused by tracheotomy tube in treatment of tetanus.
	Pelvic abscess due to perforation of the rectum during a barium enema for investigation of symptoms due to diverticulitis of the descending colon.
	Peritonitis due to traumatic perforation of small bowel, traumatic rupture of uterus, resulting from diagnostic curettage for post menopausal bleeding.
	Pulmonary collapse following surgical emphysema due to erosion of the trachea by a tracheotomy tube.
	Vagal inhibition due to rectal perforation due to enema for impacted faeces.
Needling .. 5 cases	
	Acute lobar pneumonia accelerated by haemorrhage into the bronchi due to puncture of lung during therapeutic aspiration of the pleural cavity.
	Haemopericardium due to needle puncture of dilated left auricle during pericardial paracentesis, mitral regurgitation due to rheumatic valvular disease of the heart.
	Haemorrhage due to rupture of the pleural adhesions during artificial pneumothorax.
	Haemorrhage into pericardium, puncture of coronary vein, attempted pericardial aspiration for effusion.
	Intraperitoneal haemorrhage due to needle biopsy of liver.
Packs, swabs, etc. ..	Acute intestinal obstruction due to inflammatory adhesion of the small intestine to a swab following operation for suspected appendicitis.

Table CXII—*continued*

Therapeutic misadventure associated with	Nature of misadventure
Post-operative repair 5 cases	Haemorrhage into right pleural cavity due to slipping of ligature on stump of right pulmonary artery following pneumonectomy for carcinoma of lung.
	Intraperitoneal haemorrhage due to giving way of ligature following partial gastrectomy for duodenal ulcer.
	Intrathoracic haemorrhage due to slipped ligature of pulmonary artery following pneumonectomy for carcinoma of the lungs.
	Shock and haemorrhage due to slipped ligature following hysterectomy.
	Shock, severe haemorrhage. Operation for varicose veins. Slipping of ligature from left saphenous vein.
Transfusion 3 cases	Acute pulmonary oedema, death due to accidental excess of blood transfusion, tonsillectomy.
	Pulmonary embolism, post infusional thrombosis of forearm vein.
	Pulmonary oedema following operative removal of haemangio-blastoma of the cerebellum. Incompatible blood transfusion during the course of a surgical operation.
Urethrography	Anaphylactic shock.
Other misadventures 6 cases	Cerebral infarction due to atrial septal defect due to foreign material entering the circulation from the extra corporeal circulation during operation for atrial septal defect.
	Haemorrhage from a surgically severed and unligatured branch of the right pulmonary artery following pneumonectomy for pulmonary tuberculosis.
	Haemorrhage from the left atrium following removal of left lung for carcinoma.
	Internal haemorrhage due to puncture of internal iliac artery due to repair for prolapse.
	Post-hypothermic shock after ligation of cerebral aneurysm.
	Mitral stenosis causing arterial emboli of legs. Therapeutic paravertebral injection entered main vessel and death was due to haemorrhage.
Total.. **59 cases**	

Deaths in institutions

In Table CXIII deaths registered in England and Wales in 1960 are analysed by cause of death and the type of place where death occurred. Of the 526,268 deaths registered, 279,148 (53 per cent) took place in institutions of one kind or another. The proportionate distribution per 1,000 deaths in 1960 compared with six years previously was as follows:

				1960	1954
Psychiatric hospitals { N.H.S.	..	..	..	30	26
non-N.H.S.	..	..		1	1
Other hospitals and institutions { N.H.S.	..			442	379
for the sick { non-N.H.S.				27	27
Other institutions	..	..	..	..	30	27
At deceased's own home	..	..	..	420	495
Other private house, etc.	..	..	..	50	45
Total	..			1,000	1,000

The percentage of institutional deaths has increased over the six years from 46 to 53.

There were 100,169 deaths assigned to neoplasms in 1960, of which 54,861 (55 per cent) occurred in either general or psychiatric hospitals; 1,224 (1 per cent) in other institutions; 41,358 (41 per cent) in the deceased person's own home and 2,726 (3 per cent) elsewhere.

Once again arteriosclerotic and degenerative heart disease was the principal cause of death in psychiatric hospitals, followed by pneumonia and vascular lesions affecting the central nervous system.

Table CXIII. Deaths by cause and sex according to type of institution, etc., in which they occurred, 1960, England and Wales

Cause of death	ICD No.	Total deaths M	Total deaths F	Psychiatric hospitals N.H.S. M	Psychiatric hospitals N.H.S. F	Psychiatric hospitals Other than N.H.S. M	Psychiatric hospitals Other than N.H.S. F	Other hospitals and institutions for the care of the sick N.H.S. M	Other hospitals and institutions for the care of the sick N.H.S. F	Other hospitals and institutions for the care of the sick Other than N.H.S. M	Other hospitals and institutions for the care of the sick Other than N.H.S. F	Other institutions M	Other institutions F	At deceased person's own home M	At deceased person's own home F	In other private houses and other places M	In other private houses and other places F
All causes		269,172	257,096	6,458	9,279	117	270	123,291	109,546	4,671	9,561	6,346	9,589	113,327	107,682	14,942	11,169
Infective and parasitic diseases	001–138	3,762	1,868	148	83	3	—	2,301	1,153	30	20	38	25	1,155	527	87	60
Tuberculosis of respiratory system	001–008	2,342	763	51	25	1	—	1,435	469	12	5	17	2	788	246	38	16
Tuberculosis, other forms	010–019	160	170	9	6	—	—	122	137	5	3	1	1	20	21	3	2
Syphilis and its sequelae	020–029	623	321	56	27	—	—	293	117	2	4	11	8	229	140	32	25
Gonococcal infection and other venereal diseases	030–039	29	2	—	—	—	—	24	1	—	—	—	—	5	1	—	—
Infectious diseases commonly arising in the intestinal tract	040–049	40	41	2	5	—	—	26	26	1	—	—	3	11	5	—	2
Other bacterial diseases	050–064	148	125	5	2	—	—	109	100	1	—	1	2	24	15	8	6
Spirochaetal diseases, except syphilis	070–074	10	1	—	—	—	—	10	—	—	—	—	—	—	1	—	—
Diseases attributable to viruses	080–096	344	389	24	17	2	—	240	272	8	6	8	9	59	76	3	9
Typhus and other rickettsial diseases	100–108	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—
Malaria	110–117	3	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—
Other infective and parasitic diseases	120–138	62	56	1	1	—	—	39	31	1	2	—	—	19	22	3	—
Neoplasms	140–239	53,392	46,777	532	624	13	18	27,677	22,376	1,372	2,249	552	672	22,535	18,823	711	2,015
Malignant neoplasm of buccal cavity and pharynx	140–148	1,120	666	12	8	1	—	459	301	57	45	31	20	548	262	12	30
Malignant neoplasm of digestive organs and peritoneum	150–159	19,023	18,440	203	231	5	9	9,091	8,125	502	897	230	282	8,696	7,999	296	897
Malignant neoplasm of respiratory system	160–165	19,759	3,441	153	40	3	—	10,014	1,871	413	135	135	38	8,768	1,225	273	132
Malignant neoplasm of breast and genito-urinary organs	170–181	6,903	18,098	58	238	1	5	3,722	8,205	239	976	107	265	2,697	7,663	79	746
Malignant neoplasm of other and unspecified sites	190–199	2,954	2,902	51	53	2	—	1,774	1,638	89	114	39	43	978	921	21	133
Neoplasms of lymphatic and haematopoietic tissues	200–205	3,020	2,462	26	23	1	2	2,161	1,677	61	61	8	17	744	625	19	57
Benign neoplasm	210–229	356	546	18	19	—	2	258	408	7	12	2	6	65	82	6	17
Neoplasm of unspecified nature	230–239	257	222	11	12	—	—	198	151	4	9	—	1	39	46	5	3
Allergic, endocrine system, metabolic, and nutritional diseases	240–289	2,133	4,111	53	113	—	1	1,225	2,308	27	69	20	70	754	1,442	54	108
Allergic disorders	240–245	528	684	12	13	—	—	184	254	6	13	5	6	297	355	24	43
Diseases of thyroid gland	250–254	99	646	6	21	—	—	53	346	—	7	—	14	38	238	1	20
Diabetes mellitus	260	1,193	2,366	25	59	—	—	799	1,470	18	42	11	42	317	719	23	34
Diseases of other endocrine glands	270–277	121	151	7	11	—	1	78	93	2	4	2	3	30	34	2	5
Avitaminoses, and other metabolic diseases	280–289	192	264	3	9	—	—	111	145	1	3	1	5	72	96	4	6

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Table CXIII—*continued*

Cause of death	ICD No.	Total deaths M	Total deaths F	Psychiatric hospitals N.H.S. M	N.H.S. F	Psychiatric hospitals Other than N.H.S. M	Other than N.H.S. F	Other hospitals N.H.S. M	N.H.S. F	Other hospitals Other than N.H.S. M	Other than N.H.S. F	Other institutions M	F	At deceased person's own home M	F	In other private houses and other places M	F
Diseases of the blood and blood-forming organs	290–299	777	1,248	10	26	1	—	510	750	11	25	13	36	223	384	9	27
Mental, psychoneurotic, and personality disorders	300–326	401	643	129	193	3	7	151	280	7	20	42	28	63	107	6	8
Psychoses	300–309	298	534	100	171	—	7	122	240	6	16	42	25	27	69	1	6
Psychoneurotic disorders	310–318	14	39	2	6	—	—	8	15	—	3	—	—	4	15	—	—
Disorders of character, behaviour, and intelligence	320–326	89	70	27	16	3	—	21	25	1	1	—	3	32	23	5	2
Diseases of the nervous system and sense organs	330–398	33,644	48,191	821	1,087	23	46	16,640	21,451	780	2,300	1,502	2,400	13,208	19,404	670	1,503
Vascular lesions affecting central nervous system	330–334	31,006	45,216	674	908	22	40	15,156	19,795	719	2,131	1,401	2,276	12,420	18,612	614	1,454
Inflammatory diseases of central nervous system	340–345	703	818	16	22	—	—	501	569	19	32	24	31	138	153	5	11
Other diseases of central nervous system	350–357	1,791	1,988	129	151	1	6	864	964	42	133	76	90	629	606	50	38
Diseases of nerves and peripheral ganglia	360–369	29	69	—	2	—	—	26	55	—	2	—	—	3	10	—	—
Inflammatory diseases of eye	370–379	2	4	—	1	—	—	2	2	—	—	—	—	—	—	—	—
Other diseases and conditions of eye	380–389	19	34	—	—	—	—	18	27	—	1	—	1	1	5	—	—
Diseases of ear and mastoid process	390–398	94	62	2	3	—	—	73	39	—	1	1	2	17	17	1	—
Diseases of the circulatory system	400–468	100,244	98,319	2,989	4,556	57	145	32,084	30,201	1,443	3,560	2,692	4,521	52,994	50,357	7,985	4,979
Rheumatic fever	400–402	61	64	—	3	—	—	34	38	—	—	—	1	25	21	2	1
Chronic rheumatic heart disease	410–416	2,469	4,652	33	87	—	3	1,153	2,244	33	90	32	84	1,102	1,959	116	185
Arteriosclerotic and degenerative heart disease	420–422	76,064	66,194	2,356	3,495	40	96	21,076	17,253	1,037	2,513	2,031	3,287	42,445	35,864	7,079	3,686
Other diseases of heart	430–434	6,019	7,479	95	123	1	2	2,942	3,273	102	252	172	323	2,549	3,227	158	279
Hypertensive heart disease	440–443	4,678	6,616	207	342	1	5	1,659	1,992	60	207	123	280	2,447	3,483	181	307
Other hypertensive disease	444–447	3,123	3,407	79	137	—	6	1,338	1,159	50	95	73	126	1,404	1,734	179	150
Diseases of arteries	450–456	6,428	7,814	164	259	14	31	2,901	2,878	141	368	242	387	2,730	3,591	236	300
Diseases of veins and other diseases of circulatory system	460–468	1,402	2,093	55	110	1	2	981	1,364	20	35	19	33	292	478	34	71
Diseases of the respiratory system	470–527	34,833	22,122	1,178	1,644	26	28	16,819	10,050	417	557	985	1,035	14,645	8,197	763	611
Acute upper respiratory infections	470–475	68	57	—	3	—	2	32	22	6	13	2	3	32	27	2	—
Influenza	480–483	553	545	14	16	—	—	101	79	174	330	22	34	385	375	25	28
Pneumonia	490–493	11,818	12,525	808	1,378	15	20	7,320	6,746	184	157	396	570	2,868	3,235	237	246
Bronchitis	500–502	18,997	7,488	260	185	7	5	7,812	2,521	53	57	516	377	9,789	3,955	429	288
Other diseases of respiratory system	510–527	3,397	1,507	96	62	4	1	1,554	682	—	—	49	51	1,571	605	70	49

The table on this page is printed in landscape (rotated) orientation and is very dense (16 numeric columns, most of which are age-group breakdowns whose column headings are not captured on this crop). The two numeric columns that can be read and internally verified by their sub-totals are the **Males** and **Females** columns; two further (older-age) columns are also given below. The remaining age-group columns could not be transcribed reliably.

Cause of death	ICD No.	Males	Females	(age gp A)	(age gp B)
Diseases of the digestive system	530–587	8,002	7,414	132	148
Diseases of buccal cavity and oesophagus	530–539	106	154	4	17
Diseases of the stomach and duodenum		3,323	1,636	43	26
Appendicitis	540–545	367	271	3	2
Hernia of abdominal cavity	550–553, 560, 561	700	767	11	12
Other diseases of intestines and peritoneum	570–578	1,947	2,498	43	55
Diseases of liver, gallbladder and pancreas	580–587	1,559	2,088	28	36
Diseases of the genito-urinary system	590–637	6,821	3,725	145	117
Nephritis and nephrosis	590–594	2,005	1,709	51	49
Other diseases of urinary system	600–609	1,459	1,829	38	62
Diseases of male genital organs	610–617	3,356	—	56	—
Diseases of breast, ovary, Fallopian tube and parametrium	620–626	1	34	—	2
Diseases of uterus and other female genital organs	630–637	—	153	—	4
Deliveries and complications of pregnancy, childbirth, and the puerperium	640–689	—	310	—	4
Complications of pregnancy	640–649	—	99	—	2
Abortion	650–652, 660	—	62	—	—
Delivery without mention of complication		—	3	—	—
Delivery with specified complication	670–678	—	105	—	1
Complications of the puerperium	680–689	—	41	—	1
Diseases of the skin and cellular tissue	690–716	170	294	4	19
Infections of skin and subcutaneous tissue	690–698	72	88	3	13
Other diseases of skin and subcutaneous tissue	700–716	98	206	1	6
Diseases of the bones and organs of movement	720–749	661	1,334	10	18
Arthritis and rheumatism, except rheumatic fever	720–727	388	1,066	2	10
Osteomyelitis and other diseases of bone and joint	730–738	148	195	5	4
Other diseases of musculoskeletal system	740–749	125	73	3	4
Congenital malformations	750–759	2,696	2,426	34	39
Certain diseases of early infancy	760–776	5,698	3,822	29	11
Birth injuries, asphyxia, and infections of the newborn	760–769	3,356	2,123	20	6
Other diseases peculiar to early infancy	770–776	2,342	1,699	9	5
Symptoms, senility, and ill-defined conditions	780–795	2,435	4,873	75	268
Symptoms referable to systems or organs	780–789	88	99	—	—
Senility and ill-defined diseases	790–795	2,347	4,774	75	268

Table CXIII—continued

Cause of death	ICD No.	Total deaths		Psychiatric hospitals				Other hospitals and institutions for the care of the sick				Other institutions		At deceased person's own home		In other private houses and other places	
				N.H.S.		Other than N.H.S.		N.H.S.		Other than N.H.S.							
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Accidents, poisonings, and violence (external cause)	E800–E999	13,503	9,619	169	331	3	2	5,909	5,091	82	115	53	71	2,992	2,636	4,295	1,373
Railway accidents	E800–E802	219	28	1	—	—	—	53	7	1	—	1	—	2	—	162	21
Motor vehicle traffic accidents	E810–E825	4,676	1,881	13	13	—	—	3,024	1,269	26	13	1	—	19	18	1,593	568
Motor vehicle non-traffic accidents	E830–E835	78	8	1	—	—	—	43	4	2	—	—	—	2	2	29	2
Other road vehicle accidents	E840–E845	114	46	—	1	—	—	85	36	1	—	—	—	8	1	20	8
Water transport accidents ..	E850–E858	168	6	—	—	—	—	31	—	—	—	—	—	2	—	136	6
Aircraft accidents	E860–E866	51	—	—	—	—	—	3	—	1	—	—	—	2	—	45	—
Accidental poisoning by solid and liquid substances	E870–E888	195	253	6	5	—	—	57	102	2	—	—	—	110	127	20	19
Accidental poisoning by gases and vapours	E890–E895	464	560	—	—	—	—	55	58	1	1	—	1	347	458	60	42
Accidental falls	E900–E904	1,906	3,559	60	235	—	—	1,435	2,763	29	89	18	60	187	343	177	67
Other accidents	E910–E936	2,305	1,078	45	49	1	2	609	446	9	9	11	2	459	329	1,171	243
Complication due to non-therapeutic medical and surgical procedures ..	E940–E946	6	4	—	—	—	—	3	4	—	—	—	—	3	—	—	—
Therapeutic misadventure and late complications of therapeutic procedures	E950–E959	4	3	—	—	—	—	4	2	—	—	—	—	—	—	—	—
Late effects of injury and poisoning ..	E960–E965	136	31	5	4	—	—	77	14	4	1	1	2	46	9	3	1
Suicide and self-inflicted injury ..	E970–E979	3,058	2,054	38	24	2	—	388	368	5	2	16	6	1,765	1,286	844	368
Homicide and injury purposely inflicted by other persons (not in war) ..	E980–E985	123	108	—	—	—	—	42	18	—	—	4	—	42	62	35	28
Injury resulting from operations of war	E990–E999	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Mortality analysis by method of certification

Table CXIV shows the number of deaths in 1960 for 46 groups of causes analysed according to the basis of the diagnosis of the cause of death, whether by a certifying medical practitioner, coroner's certificate or uncertified. Of a total of 526,268 deaths, 83,239 (16 per cent) were registered on the basis of a coroner's certificate after inquest or on the results of a post-mortem examination ordered by a coroner, without an inquest. In 73,579 (88 per cent) of these deaths a post-mortem was held.

Of the 441,424 deaths registered on a certificate from a medical practitioner, post-mortem examinations were made in 41,590 cases (9 per cent). There were 1,605 uncertified deaths, i.e. deaths where no doctor could give a certificate usually because there was no doctor in attendance during the last illness and the coroner did not think it necessary to hold an inquest or order a post-mortem examination; 1,087 of such deaths were assigned to arteriosclerotic and degenerative heart disease. The percentage distribution in 1960 compared with that in 1954 was:

Coroner:				1960	1954
Inquest, with post-mortem..	..	..	..	3·2	3·3
Inquest, no post-mortem ..	..	..	..	1·8	1·8
Post-mortem without inquest	..	..	..	10·8	8·3
Certifying medical practitioner:					
After post-mortem ..	..	..	..	..	7·9	9·1
Operation mentioned on certificate		..	..	1·7	2·1
Other examination mentioned	..	..	..	0·1	0·1
No examination mentioned	..	..	..	74·2	74·8
Uncertified	..	..	..	..	..	0·3	0·5

Noteworthy variations are an increase in the proportion of deaths registered on a coroner's certificate after a post-mortem without inquest and a decrease in the proportion registered on diagnosis by a certifying medical practitioner after post-mortem.

For young children whose deaths were assigned to birth injuries, postnatal asphyxia and atelectasis (ICD Nos. 760–762) the proportion certified after post-mortem was 52 per cent, and for those assigned to infections of the newborn (ICD Nos. 763–768) 66 per cent.

Table CXIV. Deaths by cause and sex, according to method of certification, 1960, England and Wales

Cause of death	ICD No.	Total deaths M	Total deaths F	Coroner Inquest held – With post-mortem M	F	Coroner Inquest held – No post-mortem M	F	Coroner Post-mortem without inquest M	F	After post-mortem M	F	Operation mentioned on death certificate M	F	Other examination mentioned on death certificate M	F	No examination mentioned M	F	Uncertified M	F
All causes		269,172	257,096	10,471	6,119	5,683	3,977	34,740	22,249	23,188	18,402	4,615	4,362	206	153	189,296	201,202	973	632
Tuberculosis of respiratory system	001–008	2,342	763	102	4	36	—	378	90	252	96	25	22	—	—	1,547	550	2	1
Tuberculosis, other forms	010–019	160	170	4	—	2	—	27	18	64	69	3	5	—	—	60	78	—	—
Syphilis and its sequelae	020–029	623	321	6	—	1	—	182	130	95	43	9	1	—	—	327	146	3	1
Typhoid fever	040	2	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—
Dysentery, all forms	045–048	15	21	1	1	—	—	5	1	2	5	—	—	—	—	7	13	—	1
Scarlet fever and streptococcal sore throat	050, 051	10	13	—	—	—	—	4	6	1	2	—	—	—	—	5	5	—	—
Whooping cough	056	20	17	—	—	—	—	2	1	3	3	—	—	—	—	15	13	—	—
Meningococcal infections	057	46	49	—	—	—	—	24	21	6	19	—	—	—	—	15	8	1	—
Acute poliomyelitis	080	19	4	—	—	—	1	1	2	6	—	1	—	—	—	10	2	—	—
Measles	085	13	18	1	—	—	—	1	4	1	2	—	—	—	—	11	11	—	—
Typhus and other rickettsial diseases	100–108	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Malaria	110–117	3	—	—	—	—	—	1	—	2	—	—	—	—	—	—	—	—	—
All other diseases classified as infective and parasitic	Rem. 001–138	508	492	30	10	18	3	84	63	118	126	3	2	—	1	254	286	1	1
Malignant neoplasms	140–205	52,779	46,009	276	56	94	27	2,023	1,224	5,550	3,943	2,617	3,116	169	118	42,035	37,512	15	13
Benign and unspecified neoplasms	210–239	613	768	16	10	4	2	87	133	142	194	35	74	2	3	327	352	—	—
Diabetes mellitus	260	1,193	2,366	5	4	1	—	64	86	134	234	32	57	1	—	956	1,980	1	5
Anaemias	290–293	593	1,066	3	4	2	—	32	59	101	144	2	2	—	1	452	856	—	—
Vascular lesions affecting central nervous system	330–334	31,006	45,216	112	41	37	21	1,965	2,667	1,504	1,702	9	5	3	—	27,308	40,697	68	83
Non-meningococcal meningitis	340	209	160	4	1	1	—	39	34	76	57	—	—	—	—	89	68	—	—
Rheumatic fever	400–402	61	64	6	—	—	—	21	9	13	24	—	—	—	—	21	31	—	—
Chronic rheumatic heart disease	410–416	2,469	4,652	28	9	12	8	429	574	289	496	21	60	—	1	1,687	3,499	3	5
Arteriosclerotic and degenerative heart disease	420–422	76,064	66,194	433	73	163	29	18,951	8,616	3,232	2,400	19	11	9	7	52,560	54,668	697	390
Other diseases of heart	430–434	6,019	7,479	36	9	12	1	293	196	377	351	2	7	1	—	5,274	6,903	24	12
Hypertension with heart disease	440–443	4,678	6,616	25	8	6	2	529	493	297	285	4	—	—	—	3,803	5,815	14	12
Hypertension without mention of heart	444–447	3,123	3,407	28	3	9	—	631	612	282	192	1	3	1	—	2,168	2,593	3	3
Influenza	480–483	553	545	5	3	4	1	92	56	25	16	—	—	—	—	427	469	—	1
Pneumonia	490–493	11,818	12,525	56	32	29	10	1,720	1,341	1,377	1,077	2	2	—	3	8,619	10,039	15	21
Bronchitis	500–502	18,997	7,488	247	24	88	6	1,694	704	1,149	386	8	1	—	—	15,781	6,359	30	8

The table below records deaths by cause (with I.C.D. numbers) and by sex within seven groups. The header row is not printed on this page; the first pair of figures is the total for males and females, and the seven following pairs (M / F) sum to those totals.

Cause	I.C.D. No.	Total M	Total F	1 M	1 F	2 M	2 F	3 M	3 F	4 M	4 F	5 M	5 F	6 M	6 F	7 M	7 F
Ulcer of stomach and duodenum	540,541	3,165	1,540	48	12	20	3	581	298	879	405	343	124	5	2	1,288	696
Appendicitis	550–553	367	271	10	7	1	3	70	41	101	65	49	47	—	—	136	108
Intestinal obstruction and hernia	560, 561, 570	1,452	1,599	35	17	13	9	351	364	362	372	191	191	3	5	499	640
Gastritis, duodenitis, enteritis, and colitis, except diarrhoea of the newborn	543, 571, 572	1,015	1,481	8	15	4	6	180	216	262	336	79	94	—	1	481	812
Cirrhosis of liver	581	685	587	27	18	12	6	77	55	195	167	10	8	3	1	361	332
Nephritis and nephrosis	590–594	2,005	1,709	10	4	4	1	112	133	303	254	1	6	—	—	1,575	1,311
Hyperplasia of prostate	610	3,259	—	23	—	13	—	221	—	432	—	685	—	3	—	1,882	—
Complications of pregnancy, childbirth, and the puerperium	640–689	—	310	—	52	—	17	—	122	—	57	—	8	—	—	—	54
Congenital malformations	750–759	2,696	2,426	20	16	3	7	468	345	816	654	67	57	2	2	1,317	1,341
Birth injuries, postnatal asphyxia and atelectasis	760–762	2,749	1,753	15	4	2	2	166	113	1,245	789	3	—	—	—	1,308	842
Infections of the newborn	763–768	524	318	5	2	4	2	100	51	239	157	—	—	—	—	174	105
Other diseases peculiar to early infancy, and immaturity unqualified	769–776	2,425	1,751	8	4	4	1	50	35	535	364	3	1	—	—	1,820	1,339
Senility without mention of psychosis, ill-defined and unknown causes	780–795	2,435	4,873	40	23	15	6	28	87	13	33	388	436	6	8	2,323	4,708
All other diseases	Rem. 140–795	18,955	22,436	485	161	179	79	2,935	3,112	2,678	2,859	388	436	—	—	12,248	15,750
Motor vehicle accidents	E810–E835	4,754	1,889	3,137	1,279	1,606	609	4	—	2	—	1	—	1	—	3	1
All other accidents	E800–E802, E840–E962	5,510	5,567	3,186	2,756	2,079	2,419	99	129	24	24	3	24	1	—	103	208
Suicide and self-inflicted injury	E963, E970–E979	3,059	2,054	1,885	1,379	1,161	666	10	—	1	—	—	—	—	—	1	1
Homicide and operations of war	E964, E965, E980–E999	180	109	105	78	47	30	9	—	1	—	—	—	—	—	18	1

Medical enquiries—additional information

Medical certificates of cause of death are commonly issued very soon after death occurs. If post-mortem investigations are in progress but have not been completed by the time of certification, valuable information may be lost unless some procedure exists for collecting it later. In England and Wales a certifying doctor can in these circumstances initial panel B on the back of the certificate to indicate that he " may be in a position later to give, on application by the Registrar General, additional information as to the cause of death for the purpose of more precise statistical classification ". When a certificate so initialled is received a letter is sent to the certifier within two or three days, reminding him of his original certification and asking whether he wishes to confirm or revise it. A revised certification is used only to amend the statistical classification of the cause of death; the entry in the register of deaths contains the original certification.

About 25,000 of these letters are sent each year and about 20,000 replies are received, of which rather more than half confirm the original assignment and the remainder amend it. In the December quarter of 1960 there were 5,078 replies: 1,944 confirmed the original certification without adding any additional information, 1,024 provided further information which did not change the assignment, and the remaining 2,110 amended the classification of the cause of death. Table CXV lists the results of these replies for the most significantly affected categories of cause of death. The first column shows the number of cases in which the cause was confirmed, the second column the number of additional deaths assigned to the category, the third the number of deaths provisionally assigned to the category on the basis of the original certification but finally assigned elsewhere. The final column shows the total number of deaths assigned to the category during the quarter, to give scale to the results.

For some categories (e.g. ICD No. 420) a large number of changes has a negligible net result, but there is a worthwhile gain in precision resulting from the transfer to more definite assignments of deaths provisionally classified to " secondary " categories (e.g. ICD Nos. 156, 433, 434.1, 434.4 pt. Cor pulmonale), " ill-defined " categories (e.g. ICD Nos. 776, 780–795), and " other and unspecified " categories (e.g. ICD Nos. 153.8, 199, 230–239, 340.3, 527.2, 578, 583, 586, 593, 754.5, 759.3).

Occasionally, additional information is obtained through this procedure about venereal disease, alcoholism and mental disorder. Replies resulting in assignment to these conditions were scrutinized.

In the December quarter 1960 there were none for mental disease, one for alcoholism and 16 for syphilis. Of the latter it appeared that 6 provided information not known at the time of certification, but in 2 cases certainly, and in a further 8 probably, the procedure had been used where the certifying doctor was reluctant to mention the cause on a document accessible to other persons. As this affected 10 deaths from syphilis out of a total of 240 during the quarter, it appears that, without this procedure for reporting additional details, syphilis might be understated by about 4 per cent.

Table CXV.   Information available after certification: effect on some causes of death, December quarter, 1960, England and Wales

Cause of death	ICD No.	Diagnosis confirmed	Increase	Decrease	Total deaths in quarter
Pulmonary tuberculosis	002	31	18	11	781
Tuberculosis, other sites	003–019	6	16	3	95
Syphilis and its sequelae	020–029	3	16	6	240
Malignant neoplasms	140–205	765	494	439	25,171
of stomach	151	94	39	62	3,556
of large intestine, specified parts ..	153.0–.3	19	29	8	2,000
of large intestine, unspecified part ..	153.8	10	9	26	222
of biliary passages and liver (primary)	155	12	29	6	373
of liver (secondary and unspecified) ..	156	7	1	16	157
of lung, bronchus and trachea ..	162, 163	203	141	69	5,689
of kidney	180	17	18	5	339
of brain and other parts of nervous system	193	19	22	6	440
of other and unspecified parts ..	199	21	20	114	414
Neoplasms of lymphatic and haematopoietic tissues	200–205	84	38	23	1,359
Benign neoplasms	210–229	11	21	4	233
Neoplasm of unspecified nature ..	230–239	9	—	47	111
of brain and other parts of nervous system	237	6	—	29	81
Cerebral haemorrhage	331	118	37	107	7,585
Cerebral embolism and thrombosis ..	332	90	66	65	9,729
Other and ill-defined vascular lesions affecting central nervous system ..	334	16	11	19	1,774
Meningitis, with no organism specified as cause	340.3	5	2	12	32
Arteriosclerotic heart disease, including coronary disease	420	421	175	173	25,282
Other myocardial degeneration	422	24	21	31	12,353
Functional disease of heart	433	9	4	17	1,321
Congestive heart failure	434.1	31	12	56	1,576
Cor pulmonale	434.4 pt.	6	1	12	230
Other and unspecified hypertensive heart disease	443	30	38	20	2,933
General arteriosclerosis	450	27	10	21	2,961
Aortic aneurysm, non-syphilitic, and dissecting aneurysm	451	15	30	2	746
Pulmonary embolism and infarction ..	465	26	50	31	412
Other venous embolism and thrombosis..	466	15	55	13	343
Pneumonia	490–493	177	127	157	6,660
Bronchitis	500–502	140	83	78	8,258
Bronchiectasis	526	9	18	6	480
Other diseases of lung and pleural cavity	527.2	—	1	8	44
Ulcer of stomach	540	36	40	28	671
Ulcer of duodenum	541	16	35	10	535
Other diseases of intestines and peritoneum	578	6	5	21	79
Cirrhosis of liver	581	19	20	5	331
Other diseases of liver	583	3	2	12	35
Cholelithiasis	584	5	14	1	183
Cholecystitis and cholangitis, without mention of calculi	585	7	4	9	134

Table CXV—*continued*

Cause of death	ICD No.	Diag-nosis con-firmed	Increase	De-crease	Total deaths in quarter
Other diseases of gallbladder and biliary ducts	586	2	3	11	40
Nephritis, not specified as acute or chronic	593	5	1	12	93
Infections of kidney	600	20	34	21	532
Congenital malformations					
of circulatory system, specified parts ..	754.0–.4, .6, .7	13	33	7	250
of heart N.O.S.	754.5	15	8	· 30	300
of genito-urinary system	757	11	18	3	146
other and unspecified	759.3	7	—	7	51
Intracranial and spinal injury at birth ..	760	35	49	30	382
Postnatal asphyxia and atelectasis ..	762	61	55	49	642
Pneumonia of newborn	763	9	25	8	196
Immaturity, unqualified	776	35	2	66	751
Symptoms, senility and ill-defined con-ditions	780–795	2	1	21	1,893

Live births, stillbirths and stillbirth rates by age and parity of mother and place of confinement

In England and Wales in 1960 there were 785,005 live births and 15,819 stillbirths. The tables which follow give details of the distribution of these births by place of confinement, and age and parity of mother.

A set of tables is available for reference at the General Register Office showing numbers of live and still births with a breakdown as in Tables 002 and 003 for individual county boroughs and administrative counties within England and Wales. Copies of these tables, or of tables for particular areas, can be obtained from the General Register Office on payment.

Table CXVI. Births by place of confinement, 1960, England and Wales

Note.   Institutions described as " Other hospital " are mainly maternity homes

Place of confinement	Live births	Stillbirths	Total births	Total births per cent by place of confinement*		Stillbirth rate per 1.000 total births*	
N.H.S. hospital ..	477,710	12,912	490,622	61·3	(60·7)	26·3	(27·3)
Other hospital ..	26,916	270	27,186	3·4	(3·5)	9·9	(11·3)
At home	263,508	2,423	265,931	33·2	(33·5)	9·1	(10·5)
Other	16,871	214	17,085	2·1	(2·3)	12·5	(13·0)
Total ..	785,005	15,819	800,824	100·0		19·8	(20·8)

* The figures in brackets are the corresponding figures for 1959.

Table CXVII. **Live births by age and parity* of mother and place of confinement, 1960, England and Wales**

Note. Institutions described as " Other hospital " are mainly maternity homes

Age-group	Parity of mother															
	0				1–3				4 and over				Total			
	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other
All ages	251,017	11,502	45,338	8,204	196,306	14,400	188,507	8,337	30,387	1,014	29,663	330	477,710	26,916	263,508	16,871
Under 25	145,195	6,438	26,819	6,263	49,246	3,270	48,610	3,851	733	28	820	16	195,174	9,736	76,249	10,130
25–34 ..	91,641	4,597	16,294	1,816	114,322	9,077	118,420	4,144	14,823	565	17,098	192	220,786	14,239	151,812	6,152
35 and over	13,777	442	2,078	110	32,504	2,041	21,175	326	14,791	420	11,690	120	61,072	2,903	34,943	556
Not stated	404	25	147	15	234	12	302	16	40	1	55	2	678	38	504	33

* Parity in this instance means the number of previous liveborn children.

Table CXVIII. **Stillbirths by age and parity* of mother and place of confinement, 1960, England and Wales**

Note. Institutions described as " Other hospital " are mainly maternity homes

Age-group	Parity of mother															
	0				1–3				4 and over				Total			
	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other
All ages	6,233	151	632	142	5,288	109	1,379	63	1,391	10	412	9	12,912	270	2,423	214
Under 25	3,022	73	333	74	960	17	284	24	36	—	10	2	4,018	90	627	100
25–34 ..	2,563	64	204	34	3,006	69	782	32	573	2	186	3	6,142	135	1,172	69
35 and over	588	10	66	7	1,308	22	310	7	776	8	214	4	2,672	40	590	18
Not stated	60	4	29	27	14	1	3	—	6	—	2	—	80	5	34	27

* Parity in this instance means the number of previous liveborn children.

Table CXIX. Percentage distribution of births for each place of confinement within each age and parity* group, 1960, England and Wales

Note. Institutions described as " Other hospital " are mainly maternity homes

Age-group	0				1–3				4 and over				Total			
	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other
All ages	79	4	14	3	49	3	46	2	50	2	47	1	62	3	33	2
Under 25	79	3	15	3	47	3	46	4	47	2	50	1	68	3	26	3
25–34	80	4	14	2	47	4	47	2	46	2	51	1	57	4	38	1
35 and over	84	3	12	1	59	3	37	1	56	2	42	—	62	3	34	1
Not stated	65	4	25	6	43	2	52	3	43	1	54	2	55	3	38	4

* Parity in this instance means the number of previous liveborn children.

Table CXX. Stillbirth rates per 1,000 total births, by age and parity* of mother and place of confinement, 1960, England and Wales

Note. Institutions described as " Other hospital " are mainly maternity homes

Age-group	0				1–3				4 and over				Total			
	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other
All ages	24	13	14	17	26	8	7	8	44	10	14	27	26	10	9	13
Under 25	20	11	12	12	19	5	6	6	47	—	12	111	20	9	8	10
25–34	27	14	12	18	26	8	7	8	37	4	11	15	27	9	8	11
35 and over	41	22	31	60	39	11	14	21	50	19	18	32	42	14	17	31
Not stated	129	138	165	643	56	77	10	—	130	—	35	—	106	116	63	450

* Parity in this instance means the number of previous liveborn children.

Table CXXI. Stillbirth rates per 1,000 total births, by parity* of mother and place of confinement, 1960, England and Wales, standard regions and Wales

Note. Institutions described as " Other hospital " are mainly maternity homes

Area	\(0\) N.H.S. hospital	\(0\) Other hospital	\(0\) At home	\(0\) Other	\(0\) Total	\(1-3\) N.H.S. hospital	\(1-3\) Other hospital	\(1-3\) At home	\(1-3\) Other	\(1-3\) Total	\(4\) and over N.H.S. hospital	\(4\) and over Other hospital	\(4\) and over At home	\(4\) and over Other	\(4\) and over Total	Total N.H.S. hospital	Total Other hospital	Total At home	Total Other	Total Total
ENGLAND AND WALES	24	13	14	17	22	26	8	7	8	17	44	10	14	27	29	26	10	9	13	20
Standard regions:																				
Northern	27	11	18	18	24	30	6	8	7	18	62	—	14	91	35	31	8	11	13	22
East and West Ridings	26	20	13	13	23	29	6	7	7	17	45	—	14	53	30	29	12	9	11	21
North Western	26	17	19	17	25	30	8	7	5	19	48	12	12	54	30	29	12	10	11	22
North Midland	28	7	10	14	23	29	7	9	4	17	51	—	15	—	32	30	7	10	9	21
Midland	25	15	15	15	23	32	12	8	7	18	45	40	16	16	29	29	14	10	8	21
Eastern	24	20	10	10	21	29	7	6	8	15	41	6	14	—	26	27	12	8	9	18
London and South Eastern	20	9	13	32	19	20	9	6	6	14	38	11	12	—	27	21	9	8	20	17
Southern	23	9	11	19	19	21	9	6	18	13	33	11	12	—	23	23	9	7	18	16
South Western	24	17	13	15	22	23	4	6	16	15	36	26	11	37	25	24	11	8	16	18
Wales (including Monmouthshire)	*29*	*9*	*20*	*10*	*26*	*28*	*3*	*11*	*12*	*21*	*36*	*—*	*19*	*18*	*28*	*29*	*6*	*14*	*12*	*24*
Wales I (South East)	*30*	*10*	*19*	*5*	*26*	*30*	*3*	*11*	*10*	*21*	*37*	*—*	*19*	*43*	*29*	*30*	*6*	*13*	*8*	*23*
Wales II (remainder)	*27*	*—*	*30*	*24*	*27*	*25*	*—*	*13*	*17*	*21*	*32*	*—*	*18*	*—*	*26*	*27*	*—*	*16*	*18*	*24*

* Parity in this instance means the number of previous liveborn children.

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GREAT BRITAIN AND IRELAND

Vital statistics

Table A1 of Part II shows the population, with figures for the constituent countries, of Great Britain at each census beginning with that of 1801 and of Great Britain and Ireland since the first census was taken in Ireland in 1821. This table also gives the population estimates for each mid-year from 1921. Figures for Northern Ireland and the Irish Republic relate throughout to the areas now so named.

Table W of Part II gives current *home* population data with marriage, live birth, death and infant mortality rates. These are repeated in Table CXXII below where they are compared with similar rates for 1938 and for the three five-year groups 1946–50, 1951–55 and 1956–60. For death rates the comparison is with 1931–38 instead of 1938 alone, for the reason given in footnote (⁵) to the table.

Table CXXII.   Vital statistics: 1938 and 1946 to 1960, Great Britain and Ireland

	Great Britain and Ireland	England	Wales	Scotland	Northern Ireland	Irish Republic(¹)
Estimated mid-year home population (in thousands)						
1960 Males	26,696	22,347	1,338	2,506	692	1,428
1960 Females	28,521	20,779	1,291	2,702	728	1,406
1960 Persons	55,217	43,126	2,629	5,208	1,420	2,834
Marriages(²)						
1960	409,090	324,273	19,341	40,101	9,881	15,494
Persons marrying per 1,000 living						
1938	16·8	17·6	16·2	15·5	13·4	10·1
1946–50 ..	17·1	17·7	17·4	16·9	13·9	11·0
1951–55 ..	15·6	15·9	15·7	16·3	13·5	10·8
1956–60 ..	15·1	15·3	15·0	16·1	13·5	10·8
1960	14·8	15·0	14·7	15·4	13·9	10·9
Live births(²)(³)						
1960	979,016	740,858	44,147	101,292	31,989	60,730
Per 1,000 living						
1938	15·7	15·1	15·3	17·7	20·0	19·4
1946–50 ..	18·5	18·0	17·9	19·8	22·0	22·2
1951–55 ..	16·0	15·3	15·7	17·8	20·8	21·3
1956–60 ..	17·0	16·4	16·2	19·1	21·7	21·1
1960	17·7	17·2	16·8	19·4	22·5	21·4

(¹) For the Irish Republic, rates are based on *home* population throughout the table. The 1960 figure is " as at early April ".

(²) The marriage and live birth rates for 1938 and from 1951 are based on *home* population, but the 1946–50 aggregates (except for the Irish Republic) are based on *total* populations.

(³) England and Wales: occurrences. Remainder: registrations.

Table CXXII—*continued*

	Great Britain and Ireland	England	Wales	Scotland	Northern Ireland	Irish Republic([1])
			Deaths([4])			
1960	635,988	493,553	32,715	61,764	15,296	32,660
Per 1,000 living ..						
1931–38([5]) ..	12·4	12·0	12·9	13·3	14·4	14·2
1946–50 ..	11·9	11·7	12·6	12·5	11·9	13·3
1951–55 ..	11·8	11·6	12·7	12·1	11·3	12·5
1956–60 ..	11·6	11·5	12·4	12·0	10·8	11·8
1960	11·5	11·4	12·4	11·9	10·8	11·5
	Infant mortality (deaths of infants under one year of age)([6])					
1960	22,438	16,001	1,117	2,673	870	1,777
Per 1,000 live births						
1938	55	53	57	70	75	67
1946–50 ..	39	36	42	47	48	57
1951–55 ..	29	27	33	33	37	40
1956–60 ..	24	22	27	28	28	33
1960	23	22	25	26	27	29

([4]) The death rates are based on total deaths and home populations, except that (apart from the Irish Republic) the 1946–49 element in the 1946–50 aggregates is based on civilian deaths and civilian populations.

([5]) Here the 1931–38 aggregate is given, since crude death rates in the year 1938 were rather lower than in adjacent years.

([6]) England and Wales: for 1957 onwards based on deaths per thousand live birth occurrences; for earlier years based on deaths per thousand related live births. Remainder: based on deaths per thousand births registered.

Population. The home population of Great Britain and Ireland at mid-1960 was estimated to be 55,217,000 (or slightly under if we stress the date of the Irish Republic estimate and assume the slight decline on earlier figures to have continued). This was an increase of 3·8 per cent on the 1951 Census population of 53,186,000. But this increase in the two islands as a whole was by no means uniform throughout the constituent parts. These showed population increases of: United Kingdom, 4·3 per cent; England and Wales, 4·6 per cent (England, 4·8 per cent; Wales, 1·2 per cent); Scotland, 2·2 per cent; Northern Ireland, 3·6 per cent. The population of the Irish Republic, however, declined in the period to 95·7 per cent of its 1951 Census figure. Of the five countries England alone (and hence England and Wales and the United Kingdom) showed a population increase greater than the figure for excess of births over deaths in 1960.

Marriage rates. The fall in the marriage rates for Great Britain and Ireland was arrested in 1960 when it was the same as in 1959—14·8 per thousand, after being 15·2 in 1957 and 14·9 in 1958. Though the rate for Scotland fell from 15·6 in 1959 to 15·4 in 1960 it was still the highest of the separate rates for the five countries, just as the increased rate in the Irish Republic from 10·7 in 1959 to 10·9 in 1960 did not raise it from the bottom of the list. England retained her 1959 rate in 1960 and those for Wales and Northern Ireland rose slightly over their 1959 figure.

Birth rates. The live birth rate (which had been 17·1 per thousand in 1958 and 1959) rose to 17·7 for Great Britain and Ireland in 1960, reflecting an increase in all five individual countries, where the respective rates per thousand living persons were:

Year	England	Wales	Scotland	Northern Ireland	Irish Republic
1958	16·4	16·2	19·2	21·6	20·9
1959	16·5	16·1	19·1	21·9	21·1
1960	17·2	16·8	19·4	22·5	21·4

However, the rates in England and Wales still remained, as always, significantly lower than those in Scotland and Ireland.

Infant mortality rates. In 1960 Great Britain and Ireland together again achieved a new low level with an infant mortality rate of 23 per thousand live births, after rates of 25 in 1956 and 1957, and 24 in 1958 and 1959, bringing the rate for the five-year period 1956–60 to 24 per thousand compared with 29 in the previous five years and 39 in 1946–50. The rate for England persisted at 22 per thousand and there was a slight fall in the somewhat higher rates for Wales, Scotland and Northern Ireland. The outstanding feature of the separate figures for the five countries in 1960 was the fall of the infant mortality rate in the Irish Republic from 32 in 1959 to 29 per thousand live births in 1960. Scotland and Northern Ireland both had a higher infant mortality rate than the Irish Republic in 1938, but by 1957 they had improved to the rate the Republic achieved in 1960.

Cause of death. Table 7 of Part I gives a complete analysis for England and Wales of deaths by cause and sex at all ages for each year from 1950 to 1960. In 1959, Appendix A of Part I (Standardised Mortality Ratios, age specific death rates and infant mortality rates from selected causes) covered England and Wales, Scotland and Northern Ireland, and some of this information was repeated, together with data for the Irish Republic, in this section of Part III. For 1960, Appendix A of Part I includes the Irish Republic as well as England and Wales, Scotland and Northern Ireland.

INTERNATIONAL CO-OPERATION IN POPULATION AND HEALTH STATISTICS

United Nations

Population Commission

The Commission meets in alternate years and did not have a session in 1960. The 1959 Commentary includes an account (pages 224–5) of the Commission's tenth session.

Commission on the Status of Women

The fourteenth session of the Commission was held in Buenos Aires from the 28th March to the 14th April. The United Kingdom was represented by Miss Ruth Tomlinson.

As reported in the 1959 Commentary (pages 225–6) one of the matters discussed at the previous session was a draft Convention on age of marriage, consent to marriage and the registration of marriages. This subject was referred back to the Commission at the fourteenth session, when two reports by the Secretary-General were presented: one was a document giving a brief factual account of current practice in different countries based on the replies of forty-four governments to a questionnaire[1], the other a draft Convention and a draft Recommendation[2] prepared in accordance with resolution 722B (XXVIII) of the Economic and Social Council.

The significance of variations in national practice shown by replies to the questionnaire was revealed in the diversity of opinion expressed during the Commission's deliberations and reflected in the summary of the proceedings incorporated in the Report[3], the annexe to which contained a draft resolution in two parts proposed for adoption by the Council. The first part proposed that the General Assembly of United Nations should adopt, as an international instrument, a Convention of three articles: the first specifying a minimum age of marriage, the second requiring free and full consent of the parties to marriage and the third providing for compulsory registration by a competent authority. The second part of the draft resolution was in the form of a Recommendation to member states to take legislative or other measures to give effect to provisions identical to those of the Convention and an invitation to the General Assembly to endorse this Recommendation.

What the Commission did not do, in spite of the efforts of some of its members, was to get the views of member states on these proposals before they were submitted for adoption by the Economic and Social Council and the General Assembly. In the event the Council ruled[4], in the following terms, that this should be done:

" *The Economic and Social Council,*

Having examined the drafts prepared by the Commission on the Status of Women on an international Convention and a recommendation on the minimum age of marriage, consent to marriage, and registration of marriages,

Requests the Secretary-General to transmit these documents to the Governments of Member States of the United Nations and members of the specialized agencies with a request that they submit any observations which they may wish to offer

(*a*) on the question of whether a convention or a recommendation, or both, should be prepared, and

(*b*) on the provisions of the drafts drawn up by the Commission, in time for the submission of such observations to the Commission at its Fifteenth Session."

Statistical Commission

The Statistical Commission again met in New York, on this occasion from the 20th April to the 5th May, for its eleventh session. Sir Harry Campion, Director of the Central Statistical Office, represented the United Kingdom, with Mr. J. Stafford, Director of Statistics at the Board of Trade, as alternate.

There was nothing unusual in the fact that the agenda ranged widely over the field of economic and social statistics, but at this session there was perhaps more emphasis on matters not directly concerned with finance. The customary review of recent and current activity in different parts of the world gave rise, in particular, to a reiteration of the need for publications on methodology related to national practices.

Under the specific head of *social statistics* the Commission recommended[5] that the first issue of a proposed *Compendium of Social Statistics* should be for the year 1963 and be published so that it would complement the next *Report on the World Social Situation* due to be presented to the Economic and Social Council in that year. The Commission was brought up to date with further developments in the attempt to formulate international definitions and measurement of *standards and levels of living* and also noted that progress was being made in the evolution of standards relating to *statistics of housing*, notably in connexion with statistical indicators of housing needs and with statistical methods appropriate to under-developed countries.

The *1960 World Census Programme* also had a prominent place in the Commission's discussions. In addition to the current reports on the census programme, the Commission was given the usual account of developments which had taken place in demographic statistics since the last report of the Population Commission.[6] The Secretary-General was requested to inform a later session of the extent to which international recommendations based on principles of census taking first elaborated by the Population Commission had been fulfilled, with an indication of the extent of regional variations. He was also asked to complete the study of population registers and of methods of obtaining vital statistics in circumstances where conventional registration methods were not feasible. The Commission took note of work that had been done during the years 1958–59 on demographic statistics and was given an account of plans for three seminars: one on the appraisal and use of population census data in Asia and the Far East, another—in collaboration with WHO— on the use of vital and health statistics for genetic and radiation studies (see page 243) and the third designed to enable statisticians in the Western Pacific to exchange information on vital and health statistics.

Conference of European Statisticians

The eighth session of the Conference was held in Geneva from the 26th to the 30th September. The United Kingdom was represented by Sir Harry Campion and by Mr. J. W. S. Walton of the Central Statistical Office.

One of the things which the Conference does is to encourage exchange of information between national offices responsible for the same kind of statistics. It is noted in the report[7] on this meeting that a statement[8] by the United Kingdom on proposals for the 1961 census was among the many which had been circulated in response to the invitation to members, made at the seventh session and renewed at this one, to furnish particulars of *census plans* and to report on their outcome.

The Conference also found scope for mutual aid in organizational and technical questions arising from use of the electronic computer and of *automatic data processing*. It was agreed to arrange a meeting of the Working Group on Electronic Data-Processing Machines in order to ventilate the problems of transition to the new methods, to look into what had been done already, to consider the feasibility of using these machines for different kinds of statistics and to advise on arrangements for the exchange of organigrammes, programmes and other schemes.

New processes encourage new ideas and both tend to introduce new words. Automatic data processing has already added much to the conventional language of statistics. New terms are apt to diminish international understanding and this is one reason for noting that the Conference continued, at this session, to show considerable interest in the compilation of *lists of statistical terms in different languages*.

Conference of Asian Statisticians

At the third session, held in Bangkok from the 5th to the 15th April, the Executive Secretary of the Economic Commission for Asia and the Far East was able to announce that progress reports, presented in a form which enabled direct comparison with *Principles and Recommendations for National Population Censuses*[9], indicated that countries were making a genuine attempt to follow the international standards closely.

The Conference gave a good deal of time to considering every aspect of census-taking. Views were exchanged on what countries had actually done by way of preparation for the census—including pilot enquiries and pre-tests—and plans for processing the results were outlined in some detail.

Closely allied to these activities of the Conference was a *seminar on the appraisal and use of census returns and statistics* arranged by the United Nations in Bombay from the 20th June to the 8th July[10]. Thirty-eight participants from eighteen countries and territories in the ECAFE region were able to draw on experience wider than that provided by those who actually conducted the seminar because, in addition to those prepared by teachers and pupils, papers were contributed by experts in different parts of the world, e.g. by Mr. B. Benjamin of the General Register Office on demographic indicators of levels of living[11].

Economic and Social Council

The Council held two sessions during 1960: the twenty-ninth from the 5th to the 21st April in New York and the thirtieth from the 5th July to the

5th August in Geneva. Business outstanding from this last was dealt with at a resumed session on the 21st–22nd December in New York.

Elections to membership of the functional commissions were conducted at the April meeting. Belgium and the United Arab Republic were re-elected to the Population Commission and Ceylon, Mexico and Uruguay were the successful candidates for three other places which became vacant in that Commission at the end of 1960.

In the summer the Council accepted a number of reports, including those of the Statistical Commission and the Status of Women Commission to which reference has already been made.

World Health Organization

Thirteenth World Health Assembly

Mr. E. M. T. Firth, Registrar General, was a member of the United Kingdom delegation at the thirteenth World Health Assembly, held in Geneva from the 3rd to the 20th May.

In the report of the Assistant Director-General[12], there was an encouraging indication that other technical branches of the Organization were making increasing use of the services of the Division of Health Statistics. This is one aspect of the integration of an international secretariat—a process which inevitably takes time. Among special subjects mentioned was a study of accidents in childhood and the preparation of a manual on statistical methods applicable in malaria eradication campaigns for the use of malaria teams in different parts of the world.

The Regional Director for Europe was able to report that increased attention had been given to health statistics and epidemiology and that a special course on epidemiological and vital statistics would be arranged annually for some years to come.

Health statistics were mentioned by a number of delegates, mostly as a matter for technical assistance. The Assembly learned that 95 per cent of hospitals in Austria were taking part voluntarily in arrangements, started in July 1958, to get cancer statistics.

The Assembly was also made aware of the response to a resolution[13] taken at the previous Assembly setting up a special account for medical research " to supplement the provision under the regular budget for an extension of the WHO's assistance in medical research programmes " and the Director-General was asked to keep the Executive Board currently informed of the amount of contributions received.

The Director-General reported that he had set up an Advisory Committee on Medical Research under the chairmanship of Dr. Arvid J. Wallgren (Sweden). The Committee met for the first time in October 1959.

Regional Committee for Europe

Sir John Charles, Chief Medical Officer at the Ministry of Health, was the United Kingdom representative at the tenth session held in Copenhagen from the 16th to the 20th August.

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On the subject of tuberculosis, the Committee adopted a resolution[14] requesting the Regional Director to encourage governments to use standardized methods in the presentation of statistics so that figures published in one country could be compared with those of another.

Vital and health statistics in genetic and radiation studies

Dr. W. P. D. Logan and Mr. B. Benjamin of the General Register Office took part in a seminar on the use of vital and health statistics in genetic and radiation studies held in Geneva from the 5th to the 10th September. The proceedings included a paper by Dr. Logan on the contribution of vital statistics to genetic and radiation epidemiology.

The meeting brought together specialists in different fields to consider what needed to be done and what it was feasible to do in the interests of genetic and radiation studies. The human geneticist and the radiation epidemiologist pointed to gaps in knowledge; the civil registrar and the population and health statisticians considered how they might be filled.

There were no formal resolutions. The report on the seminar took the form of a " Consensus of Opinion " (published as annexes to the two reports indicated in the next paragraph) on what was required and on how it might be got without any radical changes in current methods of civil registration and vital statistics.

The results of this seminar were reviewed later by the United Nations Scientific Committee on Effects of Atomic Radiation[15] and by the WHO Expert Committee on Health Statistics[18].

Expert Committee on Mental Health

Sir Kenneth Cowan, Chief Medical Officer for Scotland, was one of the *rapporteurs* at the tenth session held in Geneva from the 3rd to the 8th October.

In the chapter of the report[16] dealing with research, the Committee drew attention to the need for agreement on the definition of psychiatric terms and on the classification of mental disorders as essential bases for comparable statistics. To this end the Committee suggested some of the criteria which a standard set of terms should fulfil and emphasized " that *some* form of counting and classifying cases must be agreed upon if the statistics are to be useful for scientific work ". While recognizing that investigators might use another system if it served their own purpose better, " only the standard method would permit them to compare their work with the results of other studies ".

Expert Committee on Health Statistics

The Committee's seventh session, held in Geneva from the 5th to the 10th December, was attended by Dr. Logan who presented a paper on morbidity statistics from general practice[17] and was elected *Rapporteur*.

The report[18] on the session opens with a detailed essay on *health and morbidity surveys*. This is in three parts: a general consideration of aims, definitions, and principles of selection; characteristics, potentials and limitations of the principal types of survey; and local health surveys, surveys of specific diseases and surveys in less-developed areas.

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The Committee discussed preparations for the eighth revision of the *International Statistical Classification of Diseases, Injuries, and Causes of Death* and outlined a programme of meetings for each year to 1965 when the decennial revision conference is due to take place. Because of the interval since the last detailed revision in 1948 much has to be done before 1965. Even then manuals have to be prepared for publication in several languages so that they will be available in 1967, at least some months ahead of the beginning of 1968 when it is expected that the outcome of the eighth revision will be applied to national and international statistics. The Committee recommended " that adequate resources be available at all stages of the work in order to fulfil satisfactorily WHO's constitutional responsibility in this respect, and that no delay be incurred in preparing and effecting the Revision ".

It was with satisfaction that the Committee noted that the *WHO regional advisers on statistics* were present at the meeting. This was the result of a recommendation made at the fifth session. The Committee indicated the need for a *bibliography on health survey* methods and left the regional advisers to consider the possibility of compiling it on a regional basis in the first instance. *Hospital statistics* (to be the main item of the Committee's agenda for 1962) and *national committees on vital and health statistics* were among other subjects discussed.

Epidemiology in Health Administration

The Regional Office in Europe arranged a seminar on the application of epidemiology in health administration. It was held at Opatija in Yugoslavia from the 16th to the 23rd September.

Starting from a definition of epidemiology as " the study of the distribution of disease, both communicable and non-communicable, and of the factors influencing the pattern of disease in different communities ", the report[19] emphasized that it is concerned ultimately with solving problems of causation so that health administrators can take preventive measures.

The treatment of the subject of the seminar was under three main heads: describing the distribution of disease, investigating hypotheses of causation, and assessing the efficacy of preventive measures. The first dealt with the traditional analysis of mortality, then with routine methods of measuring morbidity as exemplified in the notification of communicable diseases, reports from public health laboratories, hospital statistics, social insurance statistics, and special registers; it concluded with an examination of survey methods. The second, looking into causation, was demonstrated by reference to *ad hoc* inquiries into chronic respiratory disease, alcohol and cirrhosis, and cardiovascular disease. Controlled trials, as well as routine methods of assessment, were examined as means of appraising the efficacy of preventive measures.

Epidemiology of Mental Disorders

An Inter-regional Conference on Techniques of Surveys on the Epidemiology of Mental Disorders, held in Naples from the 6th to the 15th December, attracted twenty-four participants including Miss E. M. Brooke of the General Register Office.

The aim of the conference, a further stage in a programme inaugurated in 1958 jointly by the WHO, the Milbank Memorial Fund, the Medical Research Council (Great Britain) and the World Federation for Mental Health (see

1958 Commentary, page 199), was to make psychiatrists, health statisticians and public health officers of Southern Europe and North Africa better acquainted with the possibilities and technical difficulties of epidemiological studies[20].

Three subjects were discussed: first, sample surveys of prevalence, with special reference to the census method and the relationship of general demographic factors to mental health; secondly, surveys based on hospital populations, with special reference to problems of retrospective and prospective cohort studies, to the use of hospital populations for assessing the results of treatment, and to record-keeping and statistical procedure; and thirdly, studies of social influences on psychiatric pathology, with special reference to the epidemiological study of migrants.

Training in vital and health statistics

In concert with the Secretariat of United Nations, the WHO Regional Office for the Western Pacific had a course of training in vital and health statistics at Manila in the Philippines from the 17th October to the 25th November. Dr. Logan was a member of the teaching staff. In addition to local participants from the Philippines, forty-one students took part in the course.

International Classification of Diseases

Reference has been made already to preparations for the eighth decennial revision of the *International Statistical Classification of Diseases, Injuries, and Causes of Death* which is due to be completed in 1965 (page 244). On the 23rd and 24th of June progress in evolving a more satisfactory classification of cardiovascular diseases was reviewed in New York where representatives of the appropriate sub-committees of the Registrar General's Advisory Committee on Medical Nomenclature and Statistics compared notes with their American colleagues. Professor W. M. Arnott, Dr. S. L. Morrison, Dr. Logan and Mr. H. G. Corbett attended from this side of the Atlantic.

WHO Centre for the Classification of Diseases

The Centre continued under the direction of Dr. Logan, assisted by Mr. Corbett, during 1960. Further progress was made in the preparation of the instruction manual for coders and an analysis of differences in the coding of 6,000 causes of death by three different offices (in Canada, England and Wales and the United States) was completed.

Reports were submitted to the Director-General of WHO on a special diagnostic list prepared by the College of General Practitioners, on analysis of multiple causes of death and on the application of the International Classification of Diseases to morbidity studies by reference to (*a*) hospital in-patient enquiry, (*b*) mental health statistics and (*c*) cancer records.

Organization for European Economic Co-operation

Manpower Committee: Group of Demographic Experts

On the 27th September Mr. Benjamin was in Paris with the Group which met for the day to put final touches on a report [21] by Monsieur Louis Henry, of the Institut National d'Etudes Démographiques, whom it had invited to revise *Demographic Trends in Western Europe 1951–1971*[22] in the light of replies to a questionnaire sent to member countries (see 1959 Commentary, page 230).

The report[23], amended to take account of the views of the Group, was then submitted for the Manpower Committee's consideration. It was in two parts: the first on general survey of probable population development in member countries from 1956 to 1976, the second giving detailed figures for each country.

Fifth Conference of British Commonwealth Statisticians

The Prime Minister of New Zealand opened the Conference in Wellington on 7th November. Mr. J. V. T. Baker, the Government Statistician of the host country, was elected Chairman. Five government departments were represented in the United Kingdom delegation, which was led by Sir Harry Campion. The Conference held sixteen plenary sessions and ended on 18th November.

The report[24] showed that the agenda ranged widely over the field of official statistics. On the initiative of the West Indian representative there was a discussion on *classifications of occupation and industry*, and a paper on *The 1961 Census of Great Britain* stimulated interest in the use of the IBM 705 computer by the General Register Office. India presented a paper dealing mainly with innovations in the *1961 Cenus of India* and another paper gave the Conference information on the *1960 Census of Ghana*. Organizational problems on such different topics as training and exchanging staff, reducing the lag in the compilation of statistics and the use of electronic aids were among the administrative aspects of statistical work discussed at the Conference.

International Statistical Institute

The thirty-second session of the Institute took place in Tokyo from the 30th May to the 9th June[25]. The programme included a meeting on the appraisal of censuses and sample surveys and another (jointly with the Biometric Society) on statistical methodology for medical research. Both meetings were well documented and the number of those who took part in the former was well above the average for sectional groups. An unusual contribution to this session was a paper[26] in which Monsieur Sauvy, foremost among French demographers, recorded his views on the statistician's duty in relation to public opinion and public policy. It was addressed primarily to those engaged in economic, demographic and social statistics properly so-called and was a synthesis of observations made in France during his long statistical career.

Other meetings

Conference on Congenital Malformations

The First International Conference on Congenital Malformations was held in London from the 18th to the 22nd July. It was attended by Dr. Logan.

Epidemiological and statistical pitfalls in investigating the causes of congenital malformations, the frequency of malformations and possible sources of variation in their incidence (e.g. the effects of maternal age, order of birth and season of year of birth) were among the subjects discussed.

London Conference on the Scientific Study of Mental Deficiency

Miss Brooke attended this Conference, held from the 24th to the 29th July in connexion with World Mental Health Year, at which papers were contributed from eleven countries and others were also represented. Biological, aetiological and epidemiological aspects of mental abnormality were among the matters discussed.

Visitors from Overseas

Those who came for periods of training at the General Register Office under various international and government schemes or who paid formal visits to discuss matters of common interest with the staff of the Office totalled seventy-one during 1960. They came from thirty-four countries.

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THE REGISTRATION SERVICE

Searches and certificates

Table T1 shows the growth in the registers at the General Register Office of births, deaths and marriages since 1866 and the extent to which the registers and indexes have been used in a series of years since then.

The number of searches undertaken in 1960 for government departments, mainly to verify ages of applicants for retirement pensions, at about 183,000 was only slightly less than in 1959. Apart from 1956, when there was a temporary increase due to the verification of the birth of persons entering at late ages into national insurance in 1948, there has been a steady downward trend from about 555,000 in 1951. This reflects the gradual accumulation of verified information in the records of the departments concerned. There were 227,544 searches in 1960 paid for by members of the public showing little change from 1959.

The total number of certificates issued at the General Register Office from the registers in 1960 increased slightly to 305,779, due to an increase in demand for adoption certificates. The total of all adoption certificates issued in 1960 was the highest since 1948. The issue of other forms of certificate was slightly lower in 1960 than in the previous year.

Re-registration of births of legitimated persons

If the parents of a child marry after the child's birth the marriage will in certain circumstances legitimate the child. In these cases the birth should be re-registered to show the child as a legitimate child of its parents. Under the Legitimacy Act, 1926, a child was not legitimated by the marriage of its parents if either of them was married to a third person when the child was born. The Legitimacy Act, 1959, which came into operation on 29th October 1959, removed this prohibition, and children to whom it had previously applied became legitimated persons on that date.

Before the Act of 1959 the average number of re-registrations had remained steady at about 2,500 annually since 1950. The first effects of the new provisions are reflected in the figures for the December Quarter, 1959, when the number of births re-registered showed an increase of 73 per cent over the corresponding quarter of 1958. In 1960, the first full year during which the new provisions were in operation, the number of re-registrations rose to 6,506. This is the highest figure recorded in any year since the re-registration of births of legitimated persons began in 1927. The numbers are, however, inflated by the fact that the new provisions affected people whose parents had married before the Act of 1959, as well as those whose parents married subsequently. About 70 per cent of the births which were re-registered in 1960 as a result of the new Act related to persons whose parents had married one another before the operation of the Act in October 1959, but who did not become legitimated until that date.

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Adopted children

The number of entries in the Adopted Children Register since 1927, when the register began, is shown in Table T4 for groups of years from 1927 to 1950 and for each year since 1951. The slight increase which began in 1959 continued in 1960, when 15,099 adoption orders were registered.

The Adoption Act, 1958, which came into operation on 1st April 1959, introduced provision for the High Court and the County Courts to make provisional adoption orders. These orders confer authority on a person not domiciled in Great Britain to take a child out of this country for adoption. In 1960, the first full year of the operation of the Act, 207 provisional adoption orders were made.

Table T4 also shows the number of orders made by each type of Court. The proportion of orders made by the County Courts has risen steadily since 1927 and in 1960, for the first time, the number of orders made by these courts was greater than the number made by Courts of Summary Jurisdiction.

Table T5 analyses adoptions by the sex, age and legitimacy of the child and shows the number of children who were adopted by one or both of their natural parents. The table shows that in 30 per cent of all adoptions one or both of the adoptive parents were the natural parents of the child. This proportion is about the same as in 1959, but is lower than in earlier years, probably reflecting the fact that a number of children who might previously have been adopted are now legitimated by virtue of the Legitimacy Act, 1959.

Registration of births, deaths and marriages
outside the United Kingdom

In the *Registrar General's Statistical Review*, Civil Text volume covering the years 1946–50 (page 164), information was given about the records received in the General Register Office for those years relating to births, deaths and marriages registered abroad. The following paragraphs give similar information for the ten years 1951–60.

Consular Registers

Registers of births and deaths in foreign countries of citizens of the United Kingdom and Colonies are maintained by British Consular Officers under the Registration of Births and Deaths (Consular Officers) Regulations, 1948, made by the Secretary of State for Foreign Affairs. The regulations provide for the deposit of certified copies of these consular records in the General Register Office.

Under the Foreign Marriage Act, 1892, marriages in foreign countries between parties of whom one at least is a British subject may be solemnized, and registered, by a British Consular Officer, or if celebrated according to local law in his presence may be registered by him. The Act requires these officers to maintain registers of such marriages and to send to the General Register Office certified copies of all entries in the registers.

The numbers of certified copies of birth, death and marriage entries received during the years 1951 to 1960 are shown below:

Year	Births	Deaths	Marriages
1951	4,026	817	533
1952	4,023	842	523
1953	4,021	831	519
1954	6,194	865	449
1955	6,244	900	408
1956	6,683	839	340
1957	6,362	721	369
1958	6,647	774	332
1959	6,686	784	354
1960	7,801	874	392

The increase in the numbers of births registered from 1954 onwards was probably due to the fact that British troops in foreign countries were encouraged to make greater use of the facilities for consular registration.

Service Departments Registers

The Registration of Births, Deaths and Marriages (Army) Act, 1879, provided for the registration of births, deaths and marriages which occur outside the United Kingdom among members of H.M. land forces and their families. These facilities were extended to the Royal Air Force by the Air Force (Application of Enactments) (No. 2) Order, 1918, made under the Air Force (Constitution) Act, 1917. The Registration of Births, Deaths and Marriages (Special Provisions) Act, 1957, as applied by Order in Council, further extended the facilities by providing for the registration of births, deaths and marriages occurring outside the United Kingdom among members of the Royal Navy and their families and among, or among the families of, civilians in the service of the Crown accompanying any of H.M. Forces abroad. Provision was also made for the registration of deaths occurring abroad among, or among the families of, members of various welfare organisations connected with H.M. Forces and births and deaths occurring aboard H.M. Ships and Aircraft. The Act of 1957 came into operation on 1st April 1959, and applied to events occurring both before and after that date. Certified copies of all entries made in pursuance of these enactments in the Service Departments Registers are sent to the General Register Office. The numbers of certified copies received in the years 1951 to 1960 are shown below. The increased figures for 1959 and 1960 reflect the additional facilities introduced by the Act of 1957 and include registration of events which occurred in earlier years.

Year	Births	Deaths	Marriages
1951	4,822	1,045	1,430
1952	4,720	895	1,183
1953	4,679	873	1,166
1954	4,696	745	1,225
1955	4,950	576	1,126
1956	5,590	660	1,049
1957	5,647	504	1,096
1958	5,858	436	1,012
1959	6,832	447	1,165
1960	8,891	543	1,265

Records kept under Foreign Marriage Orders in Council

Article 3 of the Foreign Marriage Order in Council, 1947, provided for the registration at the General Register Office of certain marriages solemnized abroad under Section 22 of the Foreign Marriage Act, 1892, which were not at that time registrable in the Army and Air Force Registers. Retrospective provision for the registration of most such marriages has now been included in the Order in Council made under the Registration of Births, Deaths and Marriages (Special Provisions) Act, 1957, and the provisions of Article 3 of the Foreign Marriage Order in Council, 1947, have, since 1st April 1959, been limited to marriages which were solemnized before that date and for the registration of which no facility exists under the Act of 1957. No such marriages have in fact been registered since 1958.

Article 6 of the Foreign Marriage Order in Council, 1947, provides that in the case of marriages solemnized according to local law in certain foreign countries without the presence of a British Consul, either party to the marriage, if he or she is a citizen of the United Kingdom and Colonies domiciled or resident in or originating from the United Kingdom, may arrange for an authenticated certificate of the marriage to be deposited in the General Register Office.

The numbers of marriages registered and marriage certificates received for deposit under the Foreign Marriage Order in Council, 1947, in the years 1951 to 1960 are shown in the following table:

Year	Registration of marriages solemnized before 1.2.48	Registration of marriages solemnized after 1.2.48	Authenticated certificates of marriage
1951	2	14	115
1952	—	7	76
1953	—	3	83
1954	1	2	79
1955	1	—	95
1956	2	1	108
1957	1	1	91
1958	—	2	111
1959	—	—	81
1960	—	—	97

Registers kept by British High Commissioners

Administrative arrangements have been made since 1950 for the registration by British High Commissioners of births and deaths taking place in certain Commonwealth countries among British subjects connected with the United Kingdom. The registration of births and deaths in India and Pakistan began in 1950. Births in Ceylon have been registered since 1957 and births in Ghana since 1959. Certified copies of the entries made in the High Commissioners' Registers are deposited in the General Register Office. In 1956 arrangements were introduced in respect of marriages in India and Pakistan whereby certificates of marriage authenticated by the High Commissioners may be deposited at the General Register Office in the same way as certificates may be deposited under Article 6 of the Foreign Marriage Order in Council, 1947.

The numbers of certified copies of birth and death entries and certificates of marriage received under these arrangements during the years 1951 to 1960 are shown below:

Year	Births	Deaths	Marriages
1951	822	51	—
1952	677	52	—
1953	620	67	—
1954	633	53	—
1955	614	64	—
1956	573	65	68
1957	1,017	51	82
1958	668	31	45
1959	702	39	36
1960	606	50	56

Marine Register Book

In accordance with the Merchant Shipping Act, 1894, masters of British ships, and of foreign ships carrying passengers to and from ports in the United Kingdom, are required to transmit to the Registrar General of Shipping and Seamen returns of all births and deaths occurring on board their ships. Certified copies of those records which are appropriate to be kept at the General Register Office are transmitted to the Registrar General. Similar returns were sent to the General Register Office from Captains of H.M. Ships up to 1st April 1959, under Section 37(6) of the Births and Deaths Registration Act, 1874. The returns received from these two sources constitute the Marine Register Book. Since 1st April, 1959, records of events occurring aboard H.M. Ships at sea are included in the returns received under the Registration of Births, Deaths and Marriages (Special Provisions) Act, 1957, which came into operation on that date.

Between 1951 and 1960 the following numbers of entries were made in the Marine Register Book:

Year	Births	Deaths
1951	177	975
1952	58	744
1953	57	659
1954	67	576
1955	49	712
1956	48	603
1957	50	543
1958	61	624
1959	51	525
1960	68	507

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Air Register Book of Births and Deaths

The Civil Aviation Acts require the Minister of Aviation to be informed of any birth or death occurring in a British civil aircraft and of any death occurring outside the United Kingdom of a traveller in such an aircraft who is killed on the journey as a result of an accident. Records of these events are kept in the Ministry of Aviation and a certified copy of each entry is sent to the Registrar General by whom they are preserved in the Air Register Book of Births and Deaths. Similar records are made in respect of persons who are reported missing and are believed to have died as a result of an accident to a British civil aircraft.

The numbers of entries received between 1951 and 1960 are as follows:

Year			Births	Deaths	Missing persons
1951	..	..	..	—	1	1
1952	..	..	..	—	38	13
1953	..	..	..	—	47	44
1954	..	..	..	1	61	35
1955	..	..	..	—	16	—
1956	..	..	..	—	78	1
1957	..	..	..	—	7	—
1958	..	..	..	—	74	4
1959	..	..	..	—	55	—
1960	..	..	..	—	12	—

THE NATIONAL HEALTH SERVICE CENTRAL REGISTER

The function of the National Health Service Central Register (which is maintained by the General Register Office on an agency basis for the National Health Service) is to ensure as far as possible that doctors' lists of National Health Service patients do not include persons who are no longer eligible to be on a particular doctor's list, e.g. because they have transferred to another doctor or because they have emigrated. The ways in which this can happen are broadly

(a) that on transfer to another doctor there may be a failure to notify the original doctor or Executive Council on removal,

(b) that a patient may be accepted as a new National Health Service patient when he is in fact already on a doctor's list,

(c) that on emigration, death or enlistment into the Forces there may be a failure to remove a patient from his doctor's list.

The Central Register acts as a clearing house for sorting out cases where any of these circumstances might arise.

During the year 1960 the Central Register received notifications of 1,572,175 persons who were reported as having registered with doctors for the first time. By reference to the existing register it was found that 248,489 of these were already on doctors' lists and duplicate registrations in these cases were thus avoided.

The Central Register also notified Executive Councils of the names of 948,292 persons for removal from doctors' lists by reason of death (529,638), enlistment (106,260), embarkation (308,510), or becoming long-term patients in mental hospitals (3,884). It was not in fact possible for Executive Councils to remove from doctors' lists all the persons notified to them in this way because, in some cases, there were insufficient identifying particulars. In addition, 1,454,915 persons were notified as having changed their doctor on removal from the area of one Executive Council to another.

During the early months of the year work was completed on the cases where, in the course of the compilation of the new alphabetical index, it had been found possible to identify patients registered with more than one doctor (usually in different areas) and patients whose names should have been removed earlier from doctors' lists because of death, enlistment or embarkation. Approximately 18,000 cases in the first category and 53,000 in the second (19,000 deaths, 5,000 enlistments and 29,000 embarkations) were thus notified to Executive Councils in 1960, additionally to the normal notifications referred to in the previous paragraph.

PARLIAMENTARY AND LOCAL GOVERNMENT ELECTORS

Electoral Registers

As required by the Electoral Registers Act, 1949, and the Representation of the People Act, 1949, a local register of electors based on a canvass is prepared in the autumn of each year. This distinguishes between those who are:

(a) parliamentary and local government electors by virtue of residence on the qualifying date;

(b) local government electors with a non-resident qualification on the qualifying date by virtue of occupancy (as owner or tenant) of any rateable land or premises of not less than £10 rateable value per occupier.

There is also a service register for any member of the Armed Forces and other persons employed in the service of the Crown in a post outside the United Kingdom and for their wives if with them.

The qualifying date for inclusion on the register is 10th October in England and Wales and the registers must be used for elections held in the twelve months beginning on the 16th February of the following year.

A person not of full age on the qualifying date but who will be so on the following 15th June is to be included on the register though there is no entitlement to vote before the following 2nd October. Such persons are shown separately in Table CXXIII below as " Young Electors ". There are 245,464 " Young Electors " on the 1960 register of electors. By definition this group should include all persons (except aliens and others who are not entitled to be registered) who were aged between 20 years 4 months and 21 years on the qualifying date. It can be estimated that the total number of persons in this age-group in England and Wales is about 400,000. After allowing for those not entitled to be registered, the discrepancy between actual and potential registrations is substantial. It would appear that the main reason is probably that many householders, in completing the forms from which the register is compiled, either fail to appreciate that persons in this age-group should be included, or fail to indicate that they are not yet 21.

Total electorate

The particulars recorded in Tables U and V for 1960 have been taken from statements sent to the Registrar General by the Electoral Registration Officers and Clerks to local authorities. They relate to the register which came into force on 16th February 1960.

Table U refers to parliamentary and Table V to local government electors and elections. Table CXXIII shows a few summary figures for 1960 and earlier years.

Table CXXIII. Parliamentary and local government electors, 1955 to 1960, England and Wales

Register (qualifying date in brackets)	Parliamentary Register				Local Government Register
	Total at qualifying date	Services Register (included in col. 2)	" Young Electors " (not included in cols. 2 and 3)		
			Total	Services (included in col. 4)	
1	2	3	4	5	6
1955 (10th Oct. 1954) ..	30,590,931	285,376	242,907	19,578	30,707,251
1956 (10th Oct. 1955) ..	30,679,509	289,615	248,420	18,259	30,795,617
1957 (10th Oct. 1956) ..	30,737,369	295,084	243,793	22,593	30,855,871
1958 (10th Oct. 1957) ..	30,795,834	283,383	250,464	26,707	30,914,568
1959 (10th Oct. 1958) ..	30,850,124	274,628	258,688	24,129	30,969,488
1960 (10th Oct. 1959) ..	30,974,254	279,936	245,464	25,435	31,096,735

The number of parliamentary electors on England and Wales consistently corresponds almost exactly with the estimated *total* population aged 21 and over, excluding aliens resident here and those categories of persons not qualified to vote. This indicates that the discrepancies in different constituencies, due mostly to time lags in adding names to the registers or removing them, largely cancel out when aggregated for England and Wales as a whole. The percentages which the total parliamentary electorate represented of the estimated total population in the years 1955 to 1960 were:

1955	1956	1957	1958	1959	1960
68·6	68·4	68·2	68·1	67·8	67·6

The proportion of the total population included on the local government register was 67·81 per cent in 1960. This is a slightly higher proportion than that of the parliamentary register, on account of the inclusion of those local government electors who have non-resident qualifications. There are just over 122 thousand of these in England and Wales. Normally the number increases only by a few hundred persons each year; but between the compilation of the 1959 and 1960 registers, three thousand names were added.

Size of parliamentary constituencies

Table CXXIV shows for 1956 and 1960 the distribution of parliamentary constituencies, classified into county and borough constituencies, by their number of parliamentary electors.

Table CXXIV. Parliamentary constituencies by size, distinguishing county and borough constituencies, 1956 and 1960, England and Wales

Total number of electors at qualifying date	Number of constituencies			
	1956		1960	
	County	Borough	County	Borough
Under 30,000	1	—	1	—
30,000–	1	—	1	1
35,000–	5	6	5	11
40,000–	21	13	21	12
45,000–	43	29	33	46
50,000–	56	72	50	71
55,000–	61	76	51	66
60,000–	38	48	37	40
65,000–	17	29	27	26
70,000–	5	22	14	22
75,000–	—	3	5	1
80,000 and over	—	1	3	3
Total	**248**	**299**	**248**	**299**

While the average number of electors in a parliamentary constituency has risen slightly from 56,087 in 1956 to 56,626 in 1960, it is interesting to note the increasingly closer approximation to each other of the average number of voters in county and borough constituencies:

Average number of electors in	1956	1958	1960
All parliamentary constituencies	56,087	56,300	56,626
County constituencies	54,448	55,545	56,750
Borough constituencies	57,446	56,926	56,522

In 1956 the average number of electors in borough constituencies was 2,998 in excess of that in county constituencies. By 1960 the average number of electors in county constituencies had gradually become 228 in excess of borough constituencies. The distribution of constituencies by size shows a marked upward shift in the county constituencies; but in the borough constituencies there is no such pronounced trend.

Local government elections

The next election for county councils takes place in 1961. An analysis of the 1958 elections appeared in the 1958 Commentary (pages 208–210) to which there is nothing to add. There was also a review of rural district council elections on pages 210–213 of the 1958 Commentary. As it was 1957 when local council elections in urban areas were last examined closely, it may be useful to take account of the position in this sector of local elections since then, although no elections were held in the metropolitan boroughs in 1960.

Table CXXV below gives the background picture for all the various types of local authority down to rural districts.

Table CXXV. Local government elections. Percentage of electorate voting in contested elections, 1952 to 1960, England and Wales

District	1952	1953	1954	1955	1956	1957	1958	1959	1960
Administrative counties..	43·2	—	—	36·5	—	—	33·3	—	—
County boroughs ..	49·9	45·2	42·8	43·8	37·6	40·0	40·3	41·0	35·4
Other boroughs and urban districts	50·9	46·8	45·7	45·0	39·4	44·1	42·9	42·1	40·4
Rural districts	52·0	47·3	47·1	48·2	41·3	45·2	46·2	42·1	37·5
Total	**48·0**	**46·2**	**44·3**	**41·6**	**38·7**	**42·2**	**38·6**	**41·6**	**38·0**

With a single exception—the low figure for non-county boroughs and urban districts in 1956—the percentage of the electorate voting in contested elections in 1960 was the lowest for over a decade in each of the above groups holding elections in this year. In many rural districts no election was held in 1960; in under ten cases percentages of over 70 were reached in England, but only in the tiny electorates returning one (or in the odd case, two) councillor(s). Wales also had five or six instances of high percentages of small electorates returning one, or occasionally two, councillor(s). Only England showed a percentage of rural electors as low as 15·2, when five councillors were elected for Abingdon R.D.

Local government elections in urban areas

Table CXXVI below pays more detailed attention to the situation in the various types of urban area than was possible in the previous table.

In the 1957 comments on urban local authority elections, attention was drawn to the significant tendency for the percentage voting to fall as the size of local authority rose. Even then this long-standing tendency was by no means an invariable rule. In one county borough with an electorate exceeding 70,000, over 60 per cent of the electors voted in 1957, a proportion not reached by any smaller county borough and by only 22 out of 347 municipal boroughs and urban districts with an electorate of 10,000 or more. In as many as six out of the nine largest county boroughs (200,000 or more electors) there was higher participation than in 7 of the 72 with smaller electorates.

In 1960 the inverse relationship between local authority size and its proportion of the electorate voting was still visible, though the average participation in elections in county boroughs with electorates of 70–100,000 was higher than that in the lower range from 50,000. This was due to the fact that three of the five largest county boroughs in the higher group averaged 44 per cent participation by voters. Nevertheless it was still as clear as ever that the larger urban authorities have special difficulties in reaching a level of participation in elections frequently exceeded in smaller urban and in rural authorities. In the 33 local authorities with electorates exceeding 100,000 (28 county boroughs and five of the municipal boroughs in the Greater London area), the average level of participation was only 33·7 per cent, ranging from 21·1 per cent (West Ham C.B.) and under 25 per cent (Sheffield C.B.) to 44·1 per cent (Coventry C.B.) and

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Table CXXVI. Local government elections. Percentage of electorate voting in contested elections in urban areas, 1960, England and Wales

Electorate at qualifying date	Percentage of electorate voting													Total electorate	Electorate voting	Percentage of electorate voting
	Under 25	25–	30–	35–	40–	45–	50–	55–	60–	65–	70–	75 and over	Total			
County boroughs																
Under 50,000 ..	—	1	3	7	3	—	4	—	—	—	—	—	18	602,410	246,120	40·9
50,000– ..	1	1	3	5	3	5	—	—	—	—	—	—	18	855,084	332,916	38·9
70,000– ..	—	1	5	4	4	5	—	—	—	—	—	—	19	1,313,419	511,953	39·0
100,000– ..	1	2	5	6	6	—	—	—	—	—	—	—	20	2,585,164	940,697	36·4
200,000 and over ..	1	3	2	2	—	—	—	—	—	—	—	—	8	3,035,148	941,139	31·0
Total	3	8	18	24	16	10	4	—	—	—	—	—	83	8,391,225	2,972,825	35·4
Municipal boroughs and urban districts																
Under 5,000 ..	4	5	7	15	18	20	18	16	15	10	2	5	135	395,692	186,901	47·2
5,000– ..	4	8	11	10	22	23	24	15	9	5	1	—	132	687,723	316,562	46·0
10,000– ..	7	6	15	27	35	29	23	13	6	2	—	—	163	1,511,627	652,486	43·2
20,000– ..	4	9	22	35	43	29	20	2	—	—	—	—	164	4,068,718	1,660,921	40·8
50,000 and over ..	5	2	10	10	7	5	—	—	—	—	—	—	39	2,590,702	921,087	35·6
Total	24	30	65	97	125	106	85	46	30	17	3	5	633	9,254,462	3,737,957	40·4

44·5 per cent (Ealing M.B.) in 1960. These authorities had six and a quarter million electors in the contested wards.

The smallest proportions voting were also exceptions to the general tendency to find them in the larger authorities. Swindon M.B. polled only 17·5 per cent of some 45,000 eligible electors, Kendal M.B. 18·1 per cent of some 2,100, and Littlehampton U.D. under 20 per cent of some 8,000.

The basis for Tables CXXV and CXXVI is the list in column 7 of Table V in Part II. This gives for each local authority and for appropriate groupings the percentage of all electors eligible to vote who did so, i.e. the quotient obtained by dividing votes cast by total electorates of divisions, wards or parishes in which a ballot was taken, multiplied by 100.

Since the 1957 comments on urban elections were made, an interesting criticism has been levelled against the use of the Table V percentages to measure participation in local elections for purposes of comparison. They are alleged to ignore the fact that participation in local elections is determined by the proportion of uncontested seats. It is suggested that a preferable index of participation in local elections would be obtained by using as denominator the total number of Local Government electors in each local authority or group of authorities. The criticised and suggested methods would show the following results if applied to the 1960 elections in the urban areas now under consideration and in rural districts:

District	Voters as a percentage of electorates of contested wards and parishes	Voters as a percentage of all Local Government electors in those local authorities holding any elections	Percentage of councillors returned unopposed
County boroughs	35·4	32·0	13·0
Municipal boroughs and urban districts	40·4	30·3	32·7
Rural districts	37·5	5·1	75·6

It is true that in some areas the total number of electors who could legally have voted in the actual (as opposed to might-have-been) elections by ballot held in 1960 coincides with the total number of Local Government electors in the local authority area. But they form the denominator in the percentage calculations in Table V in their first mentioned character. We have retained the method criticised, not because we do not accept the contention that the incidence of unopposed returns affects the fair comparison of participation in different areas, but because we cannot envisage any general acceptance of the alternative method suggested, i.e. weighting the denominator without some change in the numerator. If might-have-been elections by ballot are to be brought into the picture, the reasons for election without ballot may be thought to become relevant and these can certainly include the opinion of would-be contestants (based on past experience or otherwise) that a fight would be a waste of time, effort and money. Our present method does not necessarily reflect the belief that it would be impossible to attempt to assess such potentially controversial

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matters quantitatively. If the suggested weighting of the denominator were accompanied by adjustment of the numerator on the basis that elections by ballot would produce results similar to the average of actual contests in the area, Table V percentages would be unchanged. If the need for such consideration is accepted, the suggested simple weighting of the denominator only is equivalent to assuming that no votes whatever would have been cast. Some people might prefer to assume that such contests would only yield the national average for contested elections in that type of authority. Others might feel the local average should be used up to a certain ratio of unopposed to contested elections in an area and the national average thereafter. It is not impossible that other variations in treatment of the problem might recommend themselves, including a limited use of a higher proportion than the local average. Table V gives the number of Local Government electors and the number of councillors returned unopposed and after ballot, and interested persons can make their own calculations, including, of course, the simple substitution of the enlarged for the present denominator.

Central Index of Service Voters

During 1960 the Central Index of Service Voters (which is maintained by the General Register Office on an agency basis) received from Electoral Registration Officers 67,211 declarations by persons qualified to be included in the electoral registers as service voters. The categories of persons qualified as service voters are:

(i) any person who is a member of H.M. Forces;
(ii) any person employed in the services of the Crown in a post outside the United Kingdom;
(iii) any woman who is the wife of a service voter and is residing outside the United Kingdom to be with her husband.

A further 14,597 declarations were received in respect of persons under the age of 21 years. The Central Index notified Electoral Registration Officers of 10,502 persons who had made declarations before reaching the age of 21 years but who, during 1960, attained that age. Altogether 77,713 new service voters were added to the electoral registers.

In the same period Electoral Registration Officers were notified of 89,534 names of persons whose declarations ceased to be in force, and 14,481 declarations by persons under full age were cancelled because they ceased to have a service qualification before attaining full age.

APPENDICES

APPENDIX A

FERTILITY BY YEAR OF MARRIAGE, 1920–1960

Women married once only, England and Wales

1. *Mean family size*

Table 1 (a).—All marriage ages under 45   Mean family size

Calendar year of marriage	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Calendar year of marriage
1920-24	·04	·40	·70	·92	1·11	1·28	1·42	1·55	1·67	1·77	1·85	1·93	2·00	2·05	2·10	2·15	2·18	2·21	2·24	2·26	2·28	2·29	2·30	2·31	2·32	2·32	2·32	2·32	2·32	2·32	2·32	1920-24
1925	·04	·39	·66	·86	1·04	1·19	1·33	1·45	1·55	1·64	1·72	1·80	1·86	1·91	1·96	2·00	2·03	2·06	2·08	2·11	2·12	2·14	2·16	2·16	2·17	2·17	2·17	2·17	2·17	2·17	2·17	1925
1926	·04	·38	·66	·84	1·01	1·16	1·30	1·41	1·51	1·60	1·68	1·75	1·81	1·86	1·91	1·95	1·99	2·02	2·05	2·07	2·09	2·11	2·12	2·13	2·13	2·14	2·14	2·14	2·14	2·14	2·14	1926
1927	·04	·38	·63	·83	1·00	1·15	1·27	1·38	1·49	1·58	1·66	1·75	1·78	1·83	1·87	1·91	1·95	1·98	2·01	2·03	2·05	2·07	2·08	2·08	2·09	2·09	2·09	2·09	2·09	2·09	2·09	1927
1928	·03	·35	·63	·82	·99	1·13	1·26	1·36	1·47	1·56	1·64	1·71	1·77	1·81	1·86	1·90	1·93	1·97	2·00	2·02	2·04	2·06	2·07	2·07	2·08	2·08	2·08	2·08	2·08	2·08	2·08	1928
1929	·03	·37	·63	·82	·99	1·13	1·26	1·38	1·48	1·56	1·65	1·72	1·77	1·82	1·87	1·92	1·96	1·99	2·02	2·04	2·05	2·06	2·07	2·08	2·08	2·08	2·08	2·08	2·08	2·08	2·08	1929
1930	·03	·36	·62	·82	·98	1·13	1·27	1·38	1·48	1·57	1·64	1·71	1·76	1·82	1·87	1·92	1·96	2·00	2·03	2·04	2·06	2·07	2·08	2·08	2·08	2·08	2·09	2·09	2·09	2·09	2·09	1930
1931	·03	·36	·61	·79	·96	1·10	1·24	1·35	1·45	1·54	1·61	1·67	1·74	1·80	1·86	1·91	1·96	1·99	2·02	2·04	2·05	2·06	2·07	2·07	2·07	2·08	2·08	2·08	2·08	2·08		1931
1932	·03	·36	·59	·78	·95	1·10	1·22	1·34	1·44	1·51	1·58	1·66	1·73	1·81	1·87	1·92	1·97	2·00	2·02	2·04	2·06	2·06	2·07	2·07	2·07	2·08	2·08	2·08	2·08			1932
1933	·04	·35	·60	·78	·95	1·09	1·22	1·33	1·42	1·50	1·58	1·66	1·74	1·81	1·87	1·92	1·96	1·99	2·01	2·02	2·04	2·04	2·05	2·05	2·06	2·06	2·06	2·06				1933
1934	·03	·34	·59	·77	·94	1·08	1·21	1·30	1·39	1·49	1·58	1·67	1·74	1·82	1·87	1·92	1·95	1·97	1·99	2·00	2·01	2·02	2·03	2·03	2·03	2·03	2·03					1934
1935	·03	·33	·57	·76	·93	1·06	1·17	1·28	1·39	1·50	1·60	1·68	1·77	1·84	1·88	1·92	1·95	1·98	1·99	2·00	2·02	2·02	2·03	2·03	2·03	2·04						1935
1936	·03	·32	·55	·75	·91	1·03	1·13	1·27	1·39	1·50	1·60	1·69	1·77	1·82	1·87	1·90	1·93	1·95	1·97	1·99	2·00	2·00	2·01	2·00	2·01							1936
1937	·03	·31	·55	·73	·87	·99	1·13	1·27	1·39	1·51	1·62	1·72	1·79	1·84	1·88	1·92	1·94	1·96	1·98	1·99	2·00	2·01	2·01	2·02								1937
1938	·03	·32	·56	·73	·89	1·03	1·18	1·32	1·44	1·58	1·68	1·76	1·83	1·88	1·91	1·95	1·97	1·99	2·01	2·02	2·02	2·04	2·05									1938
1939	·02	·25	·47	·65	·82	·99	1·14	1·29	1·44	1·57	1·66	1·74	1·80	1·86	1·90	1·93	1·95	1·98	1·99	2·01	2·02	2·03										1939
1940	·02	·21	·43	·61	·79	·95	1·11	1·29	1·43	1·54	1·63	1·70	1·75	1·80	1·84	1·87	1·89	1·92	1·93	1·95	1·96											1940
1941	·02	·21	·45	·64	·82	·99	1·18	1·35	1·47	1·57	1·66	1·72	1·78	1·83	1·87	1·90	1·93	1·95	1·97	1·98												1941
1942	·02	·22	·46	·65	·84	1·05	1·24	1·38	1·50	1·60	1·69	1·75	1·81	1·86	1·90	1·94	1·97	1·99	2·01													1942
1943	·03	·27	·53	·74	·96	1·16	1·33	1·46	1·58	1·66	1·75	1·81	1·87	1·91	1·95	1·99	2·02	2·04														1943
1944	·04	·29	·58	·83	1·05	1·24	1·39	1·52	1·63	1·71	1·79	1·85	1·91	1·95	1·99	2·03	2·06															1944
1945	·04	·28	·60	·86	1·06	1·24	1·39	1·51	1·62	1·71	1·79	1·85	1·91	1·95	1·99	2·03																1945
1946	·04	·33	·66	·89	1·09	1·25	1·40	1·53	1·64	1·73	1·80	1·87	1·93	1·98	2·02																	1946
1947	·04	·34	·64	·88	1·08	1·25	1·40	1·54	1·64	1·73	1·81	1·88	1·94	1·99																		1947
1948	·04	·34	·64	·86	1·05	1·23	1·39	1·52	1·63	1·72	1·81	1·88	1·94																			1948
1949	·04	·33	·62	·84	1·04	1·22	1·38	1·51	1·63	1·72	1·81	1·89																				1949
1950	·04	·35	·62	·85	1·06	1·25	1·42	1·58	1·71	1·82	1·91																					1950
1951	·04	·31	·58	·79	1·01	1·18	1·35	1·49	1·62	1·72																						1951
1952	·04	·32	·58	·80	1·00	1·20	1·38	1·53	1·65																							1952
1953	·04	·32	·58	·81	1·03	1·23	1·41	1·56																								1953
1954	·04	·32	·58	·81	1·03	1·24	1·42																									1954
1955	·04	·33	·60	·83	1·06	1·27																										1955
1956	·04	·34	·61	·86	1·10																											1956
1957	·04	·34	·62	·87																												1957
1958	·04	·35	·63																													1958
1959	·04	·37																														1959
1960	·04																															1960

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Table 1 (b).—Marriage age under 20

Mean family size

Marriage duration (exact years)

Calendar year of marriage	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1920–24	·03	·57	·91	1·19	1·43	1·65	1·85	2·03	2·21	2·36	2·50	2·64	2·77	2·88	2·98	3·08	3·17	3·25	3·33	3·40	3·46	3·51	3·56	3·59	3·62	3·65	3·66	3·67	3·67	3·67	3·67
1925	·04	·58	·89	1·16	1·39	1·59	1·78	1·94	2·10	2·25	2·38	2·50	2·62	2·72	2·82	2·91	2·97	3·06	3·13	3·21	3·27	3·34	3·39	3·43	3·46	3·48	3·49	3·49	3·50	3·50	3·50
1926	·04	·60	·91	1·17	1·38	1·58	1·76	1·91	2·06	2·20	2·34	2·48	2·59	2·70	2·79	2·88	2·96	3·04	3·12	3·19	3·26	3·33	3·37	3·41	3·43	3·44	3·45	3·46	3·46	3·46	3·46
1927	·05	·63	·92	1·16	1·37	1·57	1·74	1·90	2·05	2·18	2·33	2·44	2·56	2·66	2·76	2·85	2·94	3·02	3·10	3·19	3·26	3·31	3·34	3·37	3·39	3·40	3·41	3·41	3·42	3·42	3·42
1928	·04	·60	·94	1·18	1·42	1·60	1·77	1·93	2·09	2·22	2·36	2·47	2·58	2·68	2·79	2·88	2·98	3·07	3·16	3·25	3·31	3·36	3·40	3·43	3·44	3·46	3·47	3·47	3·47	3·47	3·48
1929	·03	·65	·95	1·20	1·41	1·60	1·77	1·94	2·10	2·24	2·37	2·50	2·62	2·71	2·81	2·90	3·00	3·09	3·17	3·24	3·29	3·33	3·36	3·38	3·40	3·41	3·42	3·42	3·42	3·42	3·42
1930	·03	·63	·96	1·20	1·42	1·61	1·80	1·97	2·12	2·25	2·38	2·50	2·60	2·71	2·81	2·92	2·99	3·09	3·16	3·22	3·26	3·30	3·33	3·35	3·35	3·38	3·39	3·39	3·39	3·39	3·40
1931	·02	·63	·92	1·15	1·37	1·57	1·75	1·91	2·06	2·21	2·33	2·45	2·56	2·67	2·78	2·87	2·98	3·07	3·13	3·20	3·24	3·28	3·30	3·34	3·34	3·36	3·36	3·36	3·37	3·37	—
1932	·03	·62	·94	1·17	1·37	1·56	1·74	1·90	2·04	2·17	2·30	2·43	2·55	2·67	2·76	2·92	3·03	3·11	3·18	3·23	3·27	3·31	3·34	3·36	3·38	3·39	3·40	3·40	—	—	—
1933	·04	·64	·91	1·17	1·37	1·56	1·75	1·90	2·03	2·15	2·28	2·42	2·56	2·68	2·82	2·94	3·03	3·13	3·16	3·20	3·24	3·28	3·30	3·33	3·34	3·35	3·36	3·36	—	—	—
1934	·03	·64	·94	1·18	1·38	1·58	1·76	1·90	2·05	2·19	2·34	2·48	2·63	2·78	2·90	3·01	3·09	3·15	3·21	3·25	3·29	3·32	3·35	3·37	3·39	3·39	—	—	—	—	—
1935	·03	·62	·92	1·16	1·36	1·55	1·72	1·88	2·03	2·18	2·31	2·46	2·61	2·74	2·84	2·93	3·00	3·06	3·11	3·16	3·19	3·22	3·25	3·27	3·28	3·29	—	—	—	—	—
1936	·04	·62	·93	1·17	1·38	1·55	1·71	1·84	2·06	2·19	2·34	2·50	2·64	2·76	2·85	2·93	2·99	3·05	3·10	3·13	3·19	3·22	3·25	3·27	3·28	—	—	—	—	—	—
1937	·03	·59	·89	1·13	1·32	1·50	1·68	1·84	2·01	2·18	2·36	2·51	2·62	2·74	2·83	2·91	2·98	3·04	3·10	3·14	3·18	3·22	3·25	3·27	—	—	—	—	—	—	—
1938	·03	·61	·92	1·13	1·32	1·50	1·68	1·74	1·88	2·01	2·12	2·19	2·31	2·39	2·79	2·86	2·92	2·98	3·03	3·07	3·11	3·14	3·17	—	—	—	—	—	—	—	—
1939	·02	·43	·70	·93	1·12	1·32	1·51	1·69	1·91	2·07	2·18	2·35	2·46	2·56	2·64	2·71	2·77	2·83	2·88	2·92	2·96	2·99	—	—	—	—	—	—	—	—	—
1940	·02	·32	·59	·81	1·00	1·18	1·39	1·62	1·82	1·96	2·08	2·20	2·29	2·38	2·45	2·51	2·57	2·62	2·67	2·71	2·75	—	—	—	—	—	—	—	—	—	—
1941	·02	·30	·58	·79	·99	1·20	1·45	1·68	1·84	1·98	2·11	2·22	2·32	2·40	2·47	2·53	2·59	2·64	2·69	2·73	—	—	—	—	—	—	—	—	—	—	—
1942	·02	·30	·55	·78	1·04	1·25	1·49	1·68	1·83	1·97	2·08	2·19	2·28	2·36	2·43	2·51	2·56	2·61	2·65	—	—	—	—	—	—	—	—	—	—	—	—
1943	·02	·34	·62	·86	1·11	1·36	1·56	1·74	1·88	2·01	2·12	2·23	2·31	2·39	2·45	2·51	2·57	2·61	—	—	—	—	—	—	—	—	—	—	—	—	—
1944	·03	·38	·68	·96	1·23	1·46	1·65	1·82	1·95	2·07	2·18	2·28	2·36	2·44	2·51	2·57	2·63	2·62	—	—	—	—	—	—	—	—	—	—	—	—	—
1945	·04	·35	·70	1·01	1·26	1·48	1·67	1·84	1·99	2·11	2·22	2·32	2·42	2·50	2·57	2·63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1946	·04	·42	·80	1·09	1·33	1·54	1·73	1·90	2·05	2·18	2·30	2·41	2·51	2·60	2·67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1947	·04	·46	·84	1·11	1·35	1·56	1·75	1·92	2·07	2·21	2·33	2·44	2·54	2·63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1948	·04	·48	·84	1·11	1·38	1·57	1·78	1·95	2·10	2·24	2·37	2·49	2·59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1949	·04	·48	·84	1·12	1·38	1·60	1·81	1·99	2·14	2·28	2·41	2·52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1950	·04	·52	·83	1·11	1·38	1·61	1·83	2·03	2·21	2·36	2·50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1951	·04	·46	·78	1·06	1·32	1·57	1·77	1·96	2·13	2·28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1952	·04	·47	·79	1·06	1·32	1·57	1·78	1·98	2·15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1953	·04	·48	·80	1·07	1·34	1·59	1·81	2·01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1954	·04	·47	·78	1·06	1·32	1·57	1·79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1955	·04	·45	·77	1·05	1·32	1·55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1956	·04	·46	·78	1·08	1·35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1957	·04	·46	·78	1·08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1958	·04	·47	·80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1959	·04	·47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1960	·04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

APPENDIX A—continued

Table 1 (c).—Marriage age 20-24 · Mean family size

Calendar year of marriage	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1920-24	·03	·44	·76	1·00	1·21	1·39	1·56	1·70	1·84	1·96	2·06	2·15	2·24	2·31	2·37	2·43	2·48	2·52	2·55	2·58	2·60	2·62	2·63	2·64	2·65	2·65	2·65	2·65	2·65	2·65	2·65
1925	·03	·43	·73	·95	1·15	1·31	1·47	1·60	1·72	1·83	1·93	2·01	2·09	2·16	2·22	2·27	2·32	2·36	2·40	2·43	2·46	2·48	2·49	2·50	2·50	2·51	2·51	2·51	2·51	2·51	2·51
1926	·03	·42	·70	·92	1·11	1·28	1·44	1·56	1·68	1·79	1·88	1·97	2·05	2·11	2·17	2·22	2·27	2·32	2·36	2·39	2·42	2·44	2·46	2·47	2·47	2·48	2·48	2·48	2·48	2·48	2·48
1927	·03	·42	·70	·91	1·10	1·27	1·41	1·53	1·66	1·76	1·86	1·93	2·00	2·07	2·12	2·16	2·21	2·27	2·32	2·33	2·35	2·37	2·38	2·39	2·39	2·39	2·39	2·39	2·39	2·39	2·39
1928	·03	·38	·64	·89	1·08	1·24	1·39	1·50	1·64	1·73	1·82	1·91	1·98	2·04	2·09	2·16	2·19	2·25	2·29	2·30	2·33	2·34	2·35	2·36	2·36	2·37	2·36	2·37	2·36	2·36	2·36
1929	·02	·41	·70	·90	1·08	1·24	1·38	1·52	1·64	1·74	1·84	1·92	1·99	2·05	2·11	2·17	2·18	2·26	2·29	2·32	2·32	2·36	2·36	2·36	2·37	2·37	2·37	2·37	2·37	2·37	2·37
1930	·02	·39	·68	·88	1·07	1·23	1·38	1·51	1·62	1·72	1·81	1·88	1·95	2·02	2·08	2·15	2·20	2·24	2·28	2·30	2·32	2·33	2·34	2·34	2·35	2·35	2·35	2·35	2·35	2·35	2·35
1931	·02	·38	·66	·86	1·04	1·20	1·35	1·48	1·59	1·69	1·77	1·85	1·92	2·00	2·08	2·14	2·21	2·25	2·28	2·31	2·33	2·34	2·34	2·35	2·35	2·35	2·35	2·34	2·35	2·35	—
1932	·02	·38	·64	·84	1·02	1·19	1·33	1·46	1·57	1·66	1·74	1·83	1·92	2·01	2·01	2·16	2·21	2·25	2·27	2·30	2·31	2·32	2·33	2·33	2·33	2·34	2·34	2·34	2·34	—	—
1933	·03	·37	·64	·84	1·02	1·18	1·32	1·45	1·55	1·64	1·73	1·83	1·93	2·01	2·10	2·16	2·21	2·24	2·27	2·29	2·30	2·31	2·32	2·32	2·32	2·32	2·32	2·32	—	—	—
1934	·02	·37	·63	·84	1·02	1·18	1·31	1·42	1·52	1·64	1·75	1·85	1·94	2·03	2·10	2·15	2·19	2·22	2·25	2·26	2·28	2·29	2·29	2·30	2·30	2·30	2·30	—	—	—	—
1935	·02	·36	·62	·82	·98	1·16	1·27	1·39	1·52	1·65	1·76	1·87	1·98	2·06	2·12	2·17	2·21	2·24	2·26	2·28	2·30	2·30	2·31	2·31	2·32	2·32	—	—	—	—	—
1936	·03	·35	·60	·80	·93	1·12	1·24	1·37	1·50	1·63	1·75	1·87	1·96	2·03	2·12	2·13	2·16	2·19	2·21	2·24	2·24	2·25	2·24	2·26	2·26	—	—	—	—	—	—
1937	·02	·33	·58	·78	·92	1·07	1·22	1·37	1·50	1·64	1·77	1·88	1·96	2·03	2·08	2·12	2·18	2·18	2·20	2·22	2·23	2·24	2·24	2·25	—	—	—	—	—	—	—
1938	·03	·32	·57	·75	·84	1·08	1·25	1·40	1·54	1·69	1·82	1·91	1·99	2·02	2·02	2·14	2·14	2·19	2·21	2·23	2·24	2·25	2·25	—	—	—	—	—	—	—	—
1939	·02	·24	·47	·66	·84	1·03	1·20	1·36	1·53	1·67	1·78	1·87	1·94	2·00	2·05	2·08	2·12	2·14	2·16	2·18	2·19	2·20	—	—	—	—	—	—	—	—	—
1940	·02	·20	·43	·62	·81	·98	1·16	1·35	1·51	1·63	1·73	1·81	1·87	1·92	1·97	2·00	2·03	2·06	2·08	2·10	2·11	—	—	—	—	—	—	—	—	—	—
1941	·02	·20	·44	·65	·84	1·02	1·23	1·42	1·58	1·69	1·76	1·83	1·89	1·95	1·99	2·03	2·06	2·09	2·11	2·13	—	—	—	—	—	—	—	—	—	—	—
1942	·02	·21	·47	·67	·86	1·09	1·31	1·44	1·55	1·69	1·78	1·85	1·92	1·97	2·02	2·06	2·12	2·12	2·14	—	—	—	—	—	—	—	—	—	—	—	—
1943	·02	·27	·55	·75	·99	1·20	1·38	1·53	1·65	1·75	1·84	1·91	1·97	2·02	2·06	2·10	2·14	2·17	—	—	—	—	—	—	—	—	—	—	—	—	—
1944	·04	·28	·58	·85	1·08	1·28	1·44	1·58	1·69	1·79	1·87	2·00	2·00	2·05	2·08	2·14	2·17	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1945	·03	·27	·61	·88	1·09	1·28	1·43	1·56	1·67	1·77	1·85	1·92	1·98	2·04	2·08	2·12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1946	·03	·33	·68	·92	1·13	1·31	1·47	1·61	1·73	1·82	1·91	1·98	2·04	2·10	2·15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1947	·03	·34	·67	·90	1·13	1·28	1·42	1·58	1·70	1·80	1·88	1·96	2·03	2·09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1948	·03	·33	·64	·86	1·07	1·23	1·42	1·55	1·67	1·78	1·87	1·94	2·01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1949	·03	·32	·62	·84	1·04	1·23	1·40	1·54	1·66	1·76	1·86	1·94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1950	·03	·32	·60	·83	1·05	1·25	1·43	1·59	1·73	1·85	1·95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1951	·03	·28	·57	·76	·97	1·16	1·34	1·49	1·63	1·74	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1952	·03	·29	·56	·77	·98	1·18	1·37	1·53	1·66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1953	·03	·28	·55	·77	·99	1·20	1·39	1·55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1954	·03	·28	·54	·76	·99	1·20	1·40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1955	·03	·29	·56	·79	1·02	1·24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1956	·03	·30	·57	·82	1·06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1957	·03	·30	·57	·82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1958	·03	·31	·58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1959	·03	·35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1960	·03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 1 (d).—Marriage age 25-29

Mean family size

Calendar year of marriage	Marriage duration (exact years)																															Calendar year of marriage
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
1920–24	·03	·33	·62	·82	1·00	1·15	1·28	1·39	1·49	1·58	1·65	1·70	1·75	1·78	1·81	1·84	1·85	1·86	1·87	1·88	1·88	1·88	1·88	1·88	1·88	1·88	1·88	1·88	1·88	1·88	1·88	1920–24
1925	·03	·30	·56	·73	·89	1·03	1·15	1·26	1·35	1·42	1·48	1·54	1·58	1·62	1·64	1·66	1·68	1·68	1·69	1·69	1·70	1·70	1·70	1·70	1·70	1·70	1·70	1·70	1·70	1·70	1·70	1925
1926	·03	·29	·54	·72	·88	1·01	1·13	1·23	1·32	1·39	1·45	1·51	1·55	1·58	1·60	1·62	1·64	1·65	1·66	1·66	1·66	1·67	1·67	1·67	1·67	1·67	1·67	1·67	1·67	1·67	1·67	1926
1927	·03	·27	·50	·68	·83	·97	1·07	1·18	1·26	1·34	1·40	1·46	1·50	1·53	1·56	1·58	1·60	1·61	1·61	1·62	1·63	1·63	1·63	1·64	1·63	1·63	1·63	1·64	1·63	1·63	1·63	1927
1928	·03	·27	·52	·70	·85	·98	1·10	1·19	1·27	1·35	1·41	1·46	1·50	1·53	1·56	1·58	1·60	1·61	1·62	1·63	1·63	1·64	1·64	1·64	1·64	1·64	1·64	1·64	1·65	1·64	1·64	1928
1929	·03	·26	·50	·68	·83	·96	1·09	1·19	1·27	1·34	1·40	1·46	1·50	1·53	1·56	1·59	1·61	1·62	1·63	1·64	1·65	1·65	1·65	1·65	1·65	1·65	1·65	1·65	1·65	1·65	1·65	1929
1930	·02	·27	·50	·68	·84	·97	1·10	1·17	1·30	1·38	1·44	1·48	1·53	1·57	1·60	1·63	1·65	1·67	1·68	1·67	1·68	1·69	1·69	1·69	1·69	1·69	1·69	1·69	1·69	1·69	1·69	1930
1931	·02	·26	·49	·66	·82	·95	1·07	1·15	1·26	1·34	1·39	1·44	1·48	1·53	1·56	1·59	1·61	1·63	1·64	1·64	1·64	1·65	1·65	1·65	1·65	1·65	1·65	1·65	1·65	1·65	—	1931
1932	·02	·25	·47	·64	·79	·93	1·05	1·15	1·23	1·29	1·35	1·40	1·46	1·52	1·55	1·59	1·61	1·63	1·64	1·64	1·64	1·65	1·64	1·65	1·64	1·64	1·64	1·64	1·64	—	—	1932
1933	·03	·26	·49	·67	·79	·96	1·08	1·17	1·24	1·30	1·37	1·44	1·50	1·54	1·58	1·61	1·62	1·64	1·64	1·65	1·65	1·65	1·65	1·65	1·65	1·65	1·65	1·65	—	—	—	1933
1934	·03	·25	·48	·65	·80	·94	1·06	1·14	1·21	1·29	1·37	1·45	1·50	1·55	1·58	1·61	1·62	1·64	1·64	1·64	1·65	1·65	1·65	1·65	1·65	1·65	1·65	—	—	—	—	1934
1935	·02	·25	·47	·66	·82	·94	1·04	1·12	1·22	1·33	1·42	1·48	1·55	1·59	1·62	1·64	1·66	1·66	1·67	1·67	1·68	1·68	1·68	1·68	1·68	1·68	—	—	—	—	—	1935
1936	·02	·24	·45	·64	·80	·90	1·02	1·12	1·24	1·33	1·42	1·48	1·56	1·60	1·62	1·64	1·65	1·66	1·67	1·67	1·67	1·67	1·67	1·67	1·67	—	—	—	—	—	—	1936
1937	·03	·23	·45	·62	·74	·85	1·00	1·13	1·26	1·36	1·47	1·55	1·60	1·64	1·67	1·69	1·70	1·70	1·71	1·71	1·71	1·71	1·71	1·71	—	—	—	—	—	—	—	1937
1938	·03	·24	·45	·61	·74	·89	1·04	1·17	1·30	1·42	1·52	1·59	1·64	1·67	1·70	1·72	1·73	1·72	1·74	1·71	1·74	1·74	1·74	—	—	—	—	—	—	—	—	1938
1939	·02	·20	·40	·57	·74	·90	1·04	1·18	1·32	1·43	1·51	1·57	1·57	1·65	1·68	1·69	1·71	1·74	1·72	1·72	1·72	1·73	—	—	—	—	—	—	—	—	—	1939
1940	·02	·17	·37	·55	·73	·88	1·04	1·20	1·33	1·42	1·50	1·55	1·59	1·62	1·65	1·66	1·68	1·68	1·69	1·69	1·69	—	—	—	—	—	—	—	—	—	—	1940
1941	·02	·18	·40	·58	·75	·92	1·09	1·24	1·35	1·44	1·50	1·55	1·59	1·62	1·64	1·66	1·67	1·68	1·68	1·68	—	—	—	—	—	—	—	—	—	—	—	1941
1942	·03	·20	·44	·62	·80	·99	1·16	1·29	1·37	1·47	1·54	1·58	1·58	1·66	1·68	1·70	1·71	1·72	1·72	—	—	—	—	—	—	—	—	—	—	—	—	1942
1943	·04	·26	·51	·72	·93	1·12	1·27	1·40	1·49	1·56	1·63	1·68	1·72	1·75	1·77	1·78	1·80	1·80	—	—	—	—	—	—	—	—	—	—	—	—	—	1943
1944	·04	·26	·55	·79	1·00	1·17	1·31	1·42	1·51	1·59	1·66	1·71	1·75	1·78	1·80	1·82	1·84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1944
1945	·05	·27	·59	·83	1·02	1·19	1·33	1·46	1·54	1·62	1·69	1·74	1·78	1·82	1·84	1·86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1945
1946	·05	·32	·63	·86	1·04	1·20	1·34	1·45	1·55	1·63	1·70	1·75	1·80	1·83	1·86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1946
1947	·05	·33	·62	·81	1·02	1·20	1·35	1·47	1·57	1·66	1·73	1·78	1·83	1·86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1947
1948	·05	·31	·59	·80	1·00	1·17	1·32	1·44	1·54	1·56	1·69	1·75	1·80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1948
1949	·05	·29	·56	·76	·95	1·12	1·26	1·39	1·49	1·57	1·64	1·70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1949
1950	·05	·30	·57	·79	·99	1·17	1·33	1·46	1·58	1·67	1·75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1950
1951	·05	·28	·54	·74	·93	1·11	1·26	1·39	1·50	1·59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1951
1952	·05	·28	·54	·74	·94	1·12	1·28	1·41	1·53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1952
1953	·05	·28	·54	·76	·96	1·15	1·32	1·46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1953
1954	·05	·28	·54	·76	·98	1·18	1·35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1954
1955	·05	·30	·57	·80	1·02	1·22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1955
1956	·05	·31	·58	·83	1·06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1956
1957	·05	·32	·59	·84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1957
1958	·05	·33	·61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1958
1959	·05	·33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1959
1960	·05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1960

267

APPENDIX A—*continued*

Mean family size

Table 1 (e).—Marriage age 30-34

Calendar year of marriage	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1920-24	·05	·33	·57	·75	·91	1·03	1·13	1·21	1·28	1·33	1·36	1·39	1·41	1·42	1·42	1·43	1·44	1·44	1·44	1·44	1·44	1·44	1·44	1·44	1·44	1·44	1·44	1·44	1·44	1·44	1·44
1925	·06	·32	·56	·72	·87	·98	1·07	1·13	1·20	1·25	1·28	1·30	1·32	1·33	1·34	1·34	1·34	1·34	1·34	1·34	1·34	1·34	1·34	1·34	1·34	1·34	1·34	1·34	1·34	1·34	1·34
1926	·06	·29	·50	·66	·78	·88	·96	1·02	1·08	1·12	1·16	1·16	1·17	1·18	1·18	1·19	1·19	1·19	1·19	1·19	1·19	1·19	1·19	1·19	1·19	1·19	1·19	1·19	1·19	1·19	1·19
1927	·07	·31	·53	·70	·82	·93	1·03	1·09	1·14	1·18	1·21	1·24	1·26	1·26	1·26	1·26	1·26	1·27	1·27	1·27	1·27	1·27	1·27	1·27	1·27	1·27	1·27	1·27	1·27	1·27	1·27
1928	·06	·28	·50	·65	·76	·85	·93	·99	1·04	1·07	1·10	1·12	1·13	1·13	1·14	1·14	1·14	1·14	1·15	1·15	1·15	1·15	1·15	1·15	1·15	1·15	1·15	1·15	1·15	1·15	1·15
1929	·06	·28	·49	·63	·75	·84	·92	·99	1·04	1·08	1·11	1·13	1·15	1·16	1·16	1·16	1·16	1·16	1·16	1·16	1·16	1·16	1·16	1·16	1·16	1·16	1·16	1·16	1·16	1·16	1·16
1930	·05	·26	·48	·63	·75	·85	·93	·99	1·03	1·08	1·10	1·13	1·14	1·15	1·16	1·16	1·17	1·17	1·17	1·17	1·17	1·17	1·17	1·17	1·17	1·17	1·17	1·17	1·17	1·17	1·17
1931	·07	·28	·46	·61	·73	·83	·90	·97	1·02	1·05	1·08	1·10	1·12	1·12	1·13	1·14	1·14	1·15	1·15	1·15	1·15	1·15	1·15	1·15	1·15	1·15	1·15	1·15	1·15	1·15	—
1932	·06	·30	·48	·65	·78	·87	·96	1·02	1·08	1·12	1·14	1·17	1·20	1·20	1·21	1·22	1·23	1·23	1·24	1·24	1·24	1·24	1·24	1·24	1·24	1·24	1·24	1·24	1·24	—	—
1933	·04	·26	·46	·60	·74	·84	·93	·99	1·04	1·09	1·13	1·17	1·19	1·20	1·21	1·22	1·23	1·23	1·23	1·23	1·23	1·23	1·23	1·23	1·23	1·23	1·23	1·23	—	—	—
1934	·04	·25	·44	·58	·71	·80	·88	·94	·98	1·02	1·06	1·08	1·10	1·12	1·13	1·14	1·14	1·14	1·14	1·14	1·14	1·14	1·14	1·14	1·14	1·14	1·14	—	—	—	—
1935	·04	·25	·46	·60	·72	·81	·89	·95	1·02	1·07	1·10	1·13	1·15	1·17	1·18	1·19	1·19	1·19	1·19	1·19	1·19	1·19	1·19	1·19	1·19	1·19	—	—	—	—	—
1936	·04	·23	·46	·57	·69	·77	·84	·92	·99	1·05	1·09	1·13	1·17	1·17	1·17	1·17	1·18	1·18	1·18	1·18	1·18	1·18	1·18	1·18	1·18	—	—	—	—	—	—
1937	·05	·26	·46	·60	·69	·78	·87	·96	1·03	1·09	1·13	1·18	1·18	1·19	1·20	1·20	1·21	1·20	1·20	1·20	1·20	1·20	1·20	1·20	—	—	—	—	—	—	—
1938	·06	·26	·46	·60	·71	·81	·86	1·02	1·08	1·14	1·14	1·21	1·24	1·24	1·24	1·25	1·25	1·25	1·25	1·25	1·25	1·25	1·25	—	—	—	—	—	—	—	—
1939	·06	·23	·41	·55	·67	·80	·91	1·00	1·08	1·14	1·18	1·20	1·22	1·23	1·23	1·23	1·23	1·23	1·23	1·23	1·23	1·23	—	—	—	—	—	—	—	—	—
1940	·04	·19	·38	·54	·67	·80	·92	1·01	1·08	1·13	1·16	1·17	1·19	1·19	1·20	1·20	1·20	1·20	1·20	1·20	1·20	—	—	—	—	—	—	—	—	—	—
1941	·05	·20	·42	·58	·72	·84	·95	1·05	1·11	1·16	1·18	1·19	1·20	1·20	1·22	1·23	1·22	1·23	1·22	1·22	—	—	—	—	—	—	—	—	—	—	—
1942	·04	·19	·39	·53	·69	·84	·96	1·05	1·11	1·16	1·19	1·20	1·22	1·22	1·23	1·23	1·23	1·23	1·23	—	—	—	—	—	—	—	—	—	—	—	—
1943	·07	·24	·44	·64	·81	·95	1·06	1·15	1·20	1·27	1·27	1·29	1·30	1·31	1·31	1·31	1·31	1·31	—	—	—	—	—	—	—	—	—	—	—	—	—
1944	·06	·26	·50	·72	·89	1·03	1·13	1·21	1·26	1·33	1·33	1·34	1·36	1·36	1·37	1·37	1·37	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1945	·08	·27	·54	·74	·90	1·03	1·13	1·20	1·26	1·30	1·33	1·35	1·36	1·37	1·37	1·37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1946	·08	·27	·55	·74	·89	1·01	1·12	1·20	1·25	1·29	1·32	1·34	1·35	1·36	1·36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1947	·08	·27	·53	·72	·87	·99	1·09	1·17	1·21	1·26	1·29	1·31	1·32	1·33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1948	·08	·25	·50	·68	·84	·97	1·07	1·15	1·21	1·24	1·27	1·29	1·31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1949	·08	·26	·50	·68	·84	·97	1·08	1·15	1·21	1·26	1·29	1·31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1950	·08	·31	·57	·76	·93	·99	1·19	1·28	1·35	1·40	1·43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1951	·08	·29	·53	·70	·86	·99	1·10	1·18	1·25	1·29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1952	·08	·30	·54	·72	·88	1·02	1·13	1·22	1·28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1953	·08	·29	·53	·72	·88	1·02	1·12	1·21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1954	·08	·30	·53	·72	·88	1·02	1·14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1955	·08	·31	·55	·75	·91	1·05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1956	·08	·33	·58	·79	·97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1957	·08	·32	·57	·78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1958	·08	·33	·58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1959	·08	·34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1960	·08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 1 (f).—Marriage age 35-39

Mean family size

Calendar year of marriage	Marriage duration (exact years)																
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1920-24	·07	·28	·46	·57	·66	·72	·76	·79	·81	·83	·84	·84	·84	·85	·85	·85	·85
1925	·11	·32	·46	·57	·64	·68	·72	·75	·77	·78	·79	·80	·80	·80	·80	·80	·81
1926	·11	·31	·45	·54	·60	·63	·66	·68	·70	·71	·72	·72	·72	·73	·73	·74	·74
1927	·08	·29	·41	·50	·56	·60	·63	·65	·66	·67	·68	·68	·68	·68	·68	·68	·68
1928	·10	·28	·41	·50	·56	·59	·62	·63	·64	·65	·66	·66	·67	·67	·67	·67	·67
1929	·11	·28	·40	·50	·54	·58	·60	·60	·64	·64	·65	·66	·66	·66	·66	·66	·66
1930	·07	·23	·39	·48	·56	·60	·64	·65	·66	·67	·67	·68	·68	·68	·68	·68	·68
1931	·08	·27	·40	·48	·54	·61	·64	·66	·67	·68	·68	·68	·68	·68	·69	·69	·69
1932	·12	·28	·42	·50	·54	·62	·62	·62	·65	·65	·66	·66	·66	·66	·65	·66	·66
1933	·06	·24	·38	·46	·50	·54	·57	·58	·59	·59	·60	·60	·60	·60	·60	·61	·61
1934	·08	·26	·40	·49	·55	·59	·64	·64	·64	·65	·65	·66	·66	·66	·66	·66	·56
1935	·07	·24	·31	·39	·44	·47	·50	·51	·53	·54	·54	·54	·54	·54	·54	·54	·64
1936	·07	·21	·38	·46	·53	·57	·60	·63	·64	·65	·66	·66	·61	·67	·67	·67	·67
1937	·08	·21	·35	·44	·49	·52	·54	·56	·59	·63	·61	·61	·61	·67	·61	·61	·61
1938	·10	·25	·37	·44	·52	·62	·59	·65	·62	·66	·67	·67	·67	·67	·67	·67	·67
1939	·07	·19	·31	·38	·45	·50	·52	·56	·58	·59	·59	·60	·60	·60	·60	·60	·60
1940	·08	·18	·30	·38	·47	·51	·55	·58	·60	·61	·61	·61	·61	·61	·61	·61	·61
1941	·08	·20	·33	·43	·50	·56	·60	·63	·65	·65	·66	·66	·66	·66	·66	·66	·66
1942	·07	·18	·32	·41	·48	·52	·58	·64	·64	·63	·61	·63	·63	·63	·63	·63	·63
1943	·07	·19	·33	·43	·52	·58	·65	·68	·66	·66	·66	·67	·67	·67	·67	·67	·67
1944	·09	·21	·37	·49	·58	·63	·67	·66	·66	·70	·68	·70	·70	·70	·70	·70	·70
1945	·09	·23	·40	·53	·61	·66	·70	·70	·72	·73	·73	·73	·73	·73	·73	·73	
1946	·09	·22	·37	·52	·60	·66	·63	·71	·72	·73	·73	·74	·74	·74	·74		
1947	·09	·22	·37	·50	·58	·63	·66	·68	·70	·70	·70	·71	·71	·71			
1948	·09	·21	·40	·49	·57	·62	·66	·64	·67	·69	·68	·69	·69				
1949	·09	·21	·40	·48	·55	·61	·67	·68		·68		·68					
1950	·09	·24	·41	·52	·60	·66		·70		·74	·74						
1951	·09	·22	·37	·48	·55	·62	·63	·69		·67							
1952	·09	·23	·37	·47	·54	·59	·66	·62	·66								
1953	·09	·22	·40	·50	·57	·62	·65	·64									
1954	·09	·23	·40	·50	·58	·63	·67	·68									
1955	·09	·25	·40	·51	·59	·65											
1956	·09	·26	·42	·54	·63												
1957	·09	·26	·42	·55													
1958	·09	·26	·44														
1959	·09	·27															
1960	·09																

Table 1 (g).—Marriage age 40-44

Mean family size

Marriage duration (exact years)																Calendar year of marriage
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
·12	·23	·29	·32	·34	·36	·37	·37	·38	·39	·39	·39	·40	·40	·41	·41	1920-24
·22	·27	·32	·35	·37	·37	·38	·39	·39	·39	·39	·40	·40	·40	·40	·40	1925
·13	·24	·28	·30	·32	·33	·33	·34	·34	·35	·36	·36	·36	·36	·37	·37	1926
·23	·34	·37	·38	·38	·39	·39	·39	·40	·41	·42	·42	·42	·42	·42	·42	1927
·07	·14	·17	·19	·20	·20	·20	·21	·21	·21	·21	·22	·24	·22	·22	·22	1928
·07	·18	·20	·21	·21	·22	·22	·23	·23	·24	·24	·24	·24	·24	·24	·24	1929
·07	·17	·21	·24	·24	·25	·26	·27	·27	·27	·27	·27	·27	·27	·27	·27	1930
·12	·21	·22	·22	·24	·24	·25	·25	·25	·25	·26	·25	·25	·26	·26	·26	1931
·20	·21	·26	·22	·27	·23	·23	·24	·24	·24	·25	·27	·27	·25	·25	·25	1932
·16	·25	·26	·26	·27	·27	·27	·27	·27	·27	·27	·27	·27	·27	·27	·27	1933
·17	·28	·32	·34	·35	·36	·36	·36	·36	·36	·36	·36	·36	·36	·36	·36	1934
·17	·24	·26	·18	·27	·27	·27	·27	·27	·27	·27	·27	·27	·27	·27	·27	1935
·07	·13	·16	·18	·17	·19	·19	·20	·20	·20	·20	·20	·20	·20	·20	·20	1936
·08	·11	·14	·16	·17	·17	·18	·18	·18	·18	·18	·18	·18	·18	·18	·18	1937
·07	·14	·15	·20	·21	·21	·21	·21	·21	·21	·21	·21	·21	·21	·21	·21	1938
·04	·10	·13	·14	·15	·15	·15	·16	·16	·16	·16	·16	·16	·16	·16	·16	1939
·13	·16	·20	·21	·22	·23	·23	·24	·24	·24	·24	·24	·24	·24	·24	·24	1940
·09	·14	·19	·21	·23	·23	·24	·24	·24	·24	·24	·24	·24	·24	·24	·24	1941
·11	·13	·21	·19	·24	·23	·24	·24	·24	·24	·24	·24	·23	·24	·24	·24	1942
·06	·12	·17	·19	·21	·22	·22	·23	·23	·23	·23	·23	·22	·23	·23	·23	1943
·08	·13	·18	·20	·22	·23	·23	·23	·22	·22	·22	·22	·23	·23	·23	·23	1944
·11	·15	·20	·23	·24	·25	·25	·25	·23	·23	·23	·25	·25	·25	·25	·25	1945
·11	·15	·20	·23	·24	·25	·25	·25	·23	·22		·25	·25	·25	·25		1946
·11	·15	·20	·21	·24	·24	·24	·24	·22			·23	·24	·24			1947
·11	·14	·19	·21	·22	·21	·23	·22				·22	·23				1948
·11	·15	·18	·20	·22	·22	·22					·22					1949
·11	·15	·19	·21	·22	·23		·23			·23						1950
·11	·17	·21	·20	·24					·22							1951
·11	·15	·18	·20													1952
·11	·16	·18	·22													1953
·11	·16	·19														1954
·11				·23											·25	1955
·11																1956
·11																1957
·11																1958
·11																1959
·11																1960

APPENDIX A—continued

2. Fertility rates

Fertility rates

Table 2 (a).—All marriage ages under 45

Calendar year of marriage	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Calendar year of marriage
																	Marriage duration (completed years)																
1920–24	·367	·297	·222	·189	·164	·146	·128	·118	·101	·087	·076	·065	·057	·050	·044	·037	·030	·026	·022	·018	·014	·010	·008	·005	·004	·002	·001	·000	·000	·000	·000	1920–24
1925	·351	·274	·200	·178	·149	·140	·117	·105	·090	·080	·073	·062	·053	·044	·040	·032	·030	·027	·024	·019	·016	·012	·009	·004	·003	·001	·001	·000	·000	·000	·000	1925
1926	·338	·265	·199	·170	·150	·133	·114	·097	·092	·080	·072	·058	·053	·045	·042	·036	·031	·031	·025	·022	·017	·013	·007	·005	·002	·002	·000	·000	·001	·000	·000	1926
1927	·342	·256	·193	·170	·150	·126	·111	·104	·090	·080	·066	·061	·049	·041	·037	·037	·032	·031	·024	·021	·015	·011	·006	·005	·002	·001	·000	·001	·000	·000	·000	1927
1928	·319	·276	·194	·168	·141	·126	·107	·103	·089	·080	·070	·059	·046	·044	·039	·038	·037	·030	·025	·018	·014	·009	·006	·003	·002	·001	·000	·000	·000	·000	·000	1928
1929	·338	·260	·192	·162	·143	·133	·115	·100	·090	·082	·070	·058	·049	·045	·045	·032	·032	·029	·021	·016	·011	·011	·005	·003	·002	·001	·000	·000	·000	·000	·000	1929
1930	·332	·263	·193	·167	·149	·134	·115	·102	·089	·073	·062	·053	·055	·053	·050	·041	·035	·027	·018	·015	·009	·007	·005	·003	·002	·001	·000	·001	·000	·000	—	1930
1931	·329	·250	·184	·166	·146	·133	·116	·101	·087	·068	·066	·063	·065	·056	·051	·049	·036	·025	·019	·014	·008	·006	·005	·003	·001	·002	·000	·000	·000	—	—	1931
1932	·326	·239	·187	·165	·149	·128	·116	·097	·074	·074	·075	·074	·073	·061	·057	·045	·031	·025	·016	·012	·009	·007	·004	·003	·002	·001	·000	·000	—	—	—	1932
1933	·315	·249	·183	·161	·145	·130	·113	·082	·079	·085	·083	·066	·066	·052	·052	·038	·028	·020	·014	·011	·009	·006	·003	·003	·001	·001	·000	—	—	—	—	1933
1934	·314	·244	·186	·166	·144	·125	·093	·089	·096	·097	·088	·073	·072	·057	·042	·032	·025	·018	·013	·011	·008	·005	·003	·003	·001	·000	—	—	—	—	—	1934
1935	·306	·240	·191	·168	·132	·108	·103	·111	·113	·095	·089	·084	·067	·050	·038	·030	·022	·017	·013	·011	·007	·005	·004	·002	·002	—	—	—	—	—	—	1935
1936	·294	·237	·188	·161	·123	·115	·118	·121	·110	·100	·096	·076	·056	·044	·034	·025	·021	·018	·013	·009	·007	·006	·003	·002	—	—	—	—	—	—	—	1936
1937	·279	·239	·180	·137	·125	·139	·136	·122	·119	·116	·094	·068	·055	·042	·032	·026	·020	·017	·012	·010	·008	·005	·003	—	—	—	—	—	—	—	—	1937
1938	·291	·236	·169	·150	·151	·149	·139	·128	·134	·106	·079	·064	·053	·039	·030	·026	·020	·015	·013	·010	·008	·006	—	—	—	—	—	—	—	—	—	1938
1939	·229	·217	·179	·161	·168	·125	·145	·154	·126	·097	·076	·064	·054	·038	·031	·024	·024	·018	·014	·011	·009	—	—	—	—	—	—	—	—	—	—	1939
1940	·189	·215	·185	·176	·161	·164	·177	·145	·107	·086	·069	·053	·048	·038	·032	·027	·022	·018	·014	·012	—	—	—	—	—	—	—	—	—	—	—	1940
1941	·186	·236	·192	·190	·172	·194	·166	·124	·101	·084	·065	·056	·050	·038	·033	·028	·023	·020	·015	—	—	—	—	—	—	—	—	—	—	—	—	1941
1942	·196	·241	·192	·198	·207	·186	·147	·121	·099	·083	·067	·059	·049	·041	·034	·026	·026	·020	—	—	—	—	—	—	—	—	—	—	—	—	—	1942
1943	·241	·259	·204	·222	·203	·165	·138	·112	·088	·081	·066	·055	·046	·041	·035	·030	·025	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1943
1944	·246	·288	·255	·222	·183	·153	·130	·103	·088	·079	·063	·054	·048	·041	·036	·030	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1944
1945	·237	·322	·258	·204	·176	·150	·121	·107	·090	·078	·064	·057	·047	·042	·034	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1945
1946	·283	·330	·234	·194	·168	·149	·125	·109	·091	·076	·066	·058	·049	·041	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1946
1947	·301	·313	·227	·190	·171	·153	·128	·108	·093	·079	·072	·059	·051	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1947
1948	·293	·298	·221	·197	·178	·157	·128	·111	·097	·085	·073	·060	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1948
1949	·290	·291	·213	·201	·182	·158	·134	·114	·099	·086	·074	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1949
1950	·303	·276	·224	·213	·191	·174	·152	·131	·111	·095	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1950
1951	·267	·266	·214	·203	·186	·169	·147	·126	·104	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1951
1952	·273	·267	·214	·207	·195	·177	·151	·129	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1952
1953	·274	·277	·226	·217	·204	·180	·154	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1953
1954	·275	·260	·230	·222	·208	·184	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1954
1955	·286	·270	·237	·226	·207	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1955
1956	·296	·277	·251	·234	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1956
1957	·298	·279	·252	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1957
1958	·320	·285	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1958
1959	·333	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1959

270

Table 2 (b).—Marriage age under 20

Fertility rates

Marriage duration (completed years)

Calendar year of marriage	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1920–24	·535	·352	·280	·236	·219	·202	·177	·179	·156	·141	·139	·122	·115	·104	·100	·092	·079	·077	·067	·061	·050	·046	·037	·031	·022	·016	·008	·003	·001	·001	·000
1925	·545	·307	·273	·230	·198	·193	·152	·162	·155	·126	·123	·120	·100	·100	·084	·068	·086	·073	·075	·064	·064	·055	·041	·026	·017	·011	·006	·003	·002	·000	·000
1926	·556	·315	·256	·209	·199	·182	·156	·145	·146	·138	·133	·111	·110	·095	·090	·082	·077	·076	·072	·075	·063	·047	·032	·022	·015	·009	·004	·003	·002	·000	·000
1927	·580	·295	·235	·213	·205	·169	·155	·152	·127	·149	·119	·112	·104	·098	·091	·093	·072	·101	·075	·067	·051	·036	·026	·018	·013	·009	·004	·003	·001	·001	·000
1928	·564	·342	·240	·231	·186	·171	·154	·160	·136	·140	·112	·111	·099	·102	·099	·091	·096	·091	·085	·066	·050	·036	·028	·017	·012	·009	·005	·002	·001	·001	·000
1929	·614	·307	·248	·211	·191	·170	·164	·160	·144	·130	·133	·133	·091	·100	·090	·091	·095	·084	·066	·050	·037	·030	·024	·015	·009	·008	·004	·002	·001	·000	·000
1930	·596	·332	·241	·219	·190	·191	·168	·147	·128	·139	·116	·099	·106	·106	·109	·079	·093	·075	·056	·044	·035	·031	·024	·017	·011	·007	·004	·002	·001	·001	
1931	·609	·292	·226	·218	·199	·180	·165	·152	·144	·120	·118	·110	·114	·107	·095	·111	·089	·069	·054	·044	·037	·028	·023	·015	·011	·006	·004	·002	·001		
1932	·591	·298	·244	·205	·194	·172	·169	·137	·128	·130	·125	·127	·113	·125	·128	·107	·081	·075	·052	·040	·038	·030	·021	·015	·011	·007	·004	·002			
1933	·595	·298	·232	·194	·199	·173	·154	·129	·122	·133	·136	·139	·131	·139	·117	·091	·073	·059	·046	·038	·035	·027	·021	·014	·010	·006	·003				
1934	·613	·297	·239	·200	·197	·182	·144	·148	·141	·149	·146	·142	·150	·128	·101	·081	·067	·053	·045	·038	·033	·025	·018	·014	·009	·005					
1935	·591	·298	·246	·201	·186	·169	·160	·153	·155	·128	·145	·151	·131	·105	·085	·070	·058	·052	·045	·038	·031	·024	·019	·014	·010						
1936	·581	·306	·241	·216	·173	·159	·170	·148	·153	·159	·160	·140	·113	·093	·077	·065	·058	·052	·044	·039	·034	·026	·020	·013							
1937	·562	·298	·239	·187	·182	·179	·166	·163	·172	·179	·154	·126	·105	·089	·077	·069	·063	·056	·046	·041	·034	·028	·022								
1938	·580	·312	·229	·194	·195	·173	·158	·184	·182	·152	·124	·106	·096	·078	·069	·062	·055	·047	·043	·038	·032	·026									
1939	·412	·265	·233	·190	·191	·190	·184	·216	·178	·142	·122	·084	·101	·076	·071	·081	·060	·053	·043	·038	·032										
1940	·308	·267	·219	·186	·187	·208	·228	·196	·146	·124	·110	·094	·086	·072	·066	·058	·052	·048	·039	·036											
1941	·289	·272	·216	·198	·208	·251	·225	·169	·140	·127	·111	·097	·086	·066	·063	·057	·052	·045	·038												
1942	·280	·252	·229	·242	·251	·237	·187	·147	·134	·134	·107	·093	·082	·070	·063	·060	·048	·043													
1943	·318	·274	·242	·254	·246	·205	·174	·147	·127	·115	·102	·085	·074	·067	·061	·055															
1944	·346	·302	·285	·269	·225	·193	·168	·134	·118	·109	·099	·084	·079	·068	·060	·057															
1945	·311	·358	·305	·253	·217	·191	·167	·149	·128	·110	·100	·091	·083	·073	·063																
1946	·382	·386	·285	·238	·209	·192	·173	·153	·131	·119	·111	·098	·085	·073																	
1947	·429	·376	·274	·238	·209	·193	·169	·148	·135	·122	·116	·100	·089																		
1948	·440	·363	·268	·247	·221	·205	·173	·151	·139	·131	·117	·099																			
1949	·449	·359	·274	·258	·229	·203	·178	·154	·141	·128	·116																				
1950	·481	·315	·281	·265	·234	·221	·199	·176	·156	·138																					
1951	·429	·318	·277	·267	·238	·214	·194	·169	·148																						
1952	·437	·318	·272	·260	·244	·219	·195	·169																							
1953	·444	·316	·278	·268	·251	·222	·191																								
1954	·432	·314	·277	·263	·250	·221																									
1955	·418	·317	·284	·265	·235																										
1956	·424	·326	·295	·267																											
1957	·420	·327	·297																												
1958	·433	·331																													
1959	·439																														

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Table 2 (c).— Marriage age 20-24   Fertility rates

Calendar year of marriage	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1920–24	·409	·319	·242	·206	·182	·165	·146	·135	·120	·105	·092	·080	·072	·064	·057	·049	·041	·034	·029	·024	·018	·012	·009	·006	·003	·001	·001	·000	·000	·000	·000
1925	·401	·297	·221	·198	·160	·164	·130	·121	·106	·097	·087	·077	·071	·055	·054	·046	·042	·038	·033	·027	·019	·014	·009	·005	·002	·001	·000	·000	·000	·000	·000
1926	·382	·289	·215	·190	·172	·151	·130	·112	·110	·095	·087	·073	·068	·057	·056	·049	·045	·045	·034	·028	·022	·015	·009	·005	·002	·002	·000	·000	·000	·000	·000
1927	·389	·280	·203	·192	·169	·143	·131	·123	·107	·092	·077	·072	·051	·051	·046	·047	·040	·040	·034	·024	·018	·011	·007	·004	·002	·001	·000	·000	·000	·000	·000
1928	·355	·301	·212	·184	·159	·142	·123	·121	·106	·093	·087	·072	·057	·054	·047	·050	·049	·038	·030	·022	·016	·011	·007	·002	·001	·000	·000	·000	·000	·000	·000
1929	·383	·287	·208	·176	·160	·149	·123	·115	·107	·099	·080	·068	·063	·056	·061	·052	·038	·035	·026	·020	·015	·008	·005	·003	·001	·000	·000	·000	·000	·000	·000
1930	·369	·288	·207	·182	·166	·147	·128	·112	·104	·083	·072	·071	·066	·068	·054	·055	·043	·033	·023	·018	·012	·007	·005	·003	·002	·001	·000	·000	·000	·000	—
1931	·362	·279	·198	·179	·160	·150	·129	·115	·098	·080	·078	·075	·081	·073	·068	·062	·046	·032	·025	·017	·009	·007	·005	·002	·002	·001	·000	·000	·000	—	—
1932	·360	·260	·200	·182	·165	·142	·131	·112	·084	·085	·089	·087	·092	·077	·070	·054	·038	·029	·021	·014	·011	·007	·005	·002	·001	·001	·000	·000	—	—	—
1933	·343	·272	·199	·176	·156	·145	·132	·096	·084	·093	·099	·095	·083	·084	·065	·047	·037	·026	·018	·014	·010	·007	·005	·002	·001	·000	·000	—	—	—	—
1934	·345	·265	·203	·184	·156	·138	·106	·103	·116	·114	·102	·089	·088	·069	·052	·040	·032	·024	·017	·014	·009	·006	·004	·002	·001	·000	—	—	—	—	—
1935	·336	·263	·204	·186	·146	·115	·130	·130	·129	·111	·109	·105	·084	·062	·050	·039	·030	·023	·017	·014	·009	·006	·004	·002	·001	—	—	—	—	—	—
1936	·322	·252	·203	·203	·139	·125	·120	·134	·128	·120	·115	·092	·070	·055	·045	·033	·028	·023	·017	·012	·008	·006	·004	·002	—	—	—	—	—	—	—
1937	·301	·258	·192	·154	·139	·149	·149	·132	·137	·134	·109	·082	·067	·054	·040	·032	·026	·021	·015	·012	·008	·005	·003	—	—	—	—	—	—	—	—
1938	·298	·254	·179	·167	·164	·163	·153	·142	·153	·122	·093	·077	·066	·048	·037	·031	·028	·019	·015	·012	·008	·006	—	—	—	—	—	—	—	—	—
1939	·228	·226	·190	·184	·184	·168	·175	·139	·116	·106	·088	·074	·063	·044	·036	·031	·036	·021	·016	·012	·008	—	—	—	—	—	—	—	—	—	—
1940	·189	·222	·192	·189	·175	·174	·197	·160	·119	·098	·079	·059	·055	·043	·037	·031	·026	·021	·016	·012	—	—	—	—	—	—	—	—	—	—	—
1941	·179	·248	·205	·191	·184	·210	·158	·135	·111	·095	·071	·062	·057	·045	·039	·031	·027	·022	·017	—	—	—	—	—	—	—	—	—	—	—	—
1942	·192	·258	·202	·197	·223	·199	·181	·138	·110	·092	·074	·064	·055	·045	·039	·033	·028	·023	—	—	—	—	—	—	—	—	—	—	—	—	—
1943	·244	·280	·202	·236	·217	·176	·149	·123	·096	·088	·071	·060	·051	·046	·040	·034	·028	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1944	·241	·303	·269	·234	·192	·163	·139	·112	·095	·085	·068	·059	·051	·046	·040	·033	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1945	·240	·336	·269	·213	·184	·159	·128	·112	·096	·084	·069	·062	·051	·045	·038	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1946	·297	·348	·246	·206	·180	·163	·135	·118	·099	·083	·073	·064	·056	·047	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1947	·311	·326	·235	·199	·180	·162	·136	·117	·100	·086	·078	·066	·056	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1948	·297	·306	·227	·203	·185	·166	·135	·119	·105	·091	·078	·066	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1949	·289	·298	·215	·206	·188	·166	·141	·122	·106	·091	·080	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1950	·290	·282	·224	·218	·200	·185	·161	·128	·118	·102	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1951	·249	·267	·213	·207	·191	·177	·163	·136	·111	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1952	·253	·269	·212	·212	·202	·186	·159	·137	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1953	·249	·264	·225	·222	·209	·189	·163	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1954	·249	·254	·228	·225	·214	·192	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1955	·260	·264	·237	·229	·216	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1956	·267	·270	·248	·237	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1957	·268	·272	·246	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1958	·275	·276	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1959	·313	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Fertility rates

Table 2 (d).—Marriage age 25-29

Calendar year of marriage	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Calendar year of marriage
1920-24	·302	·285	·205	·175	·149	·130	·112	·102	·083	·070	·056	·047	·036	·030	·023	·016	·010	·007	·005	·003	·001	·001	·001	·000	·000	—	—	—	—	—	—	1920-24
1925	·263	·261	·173	·160	·143	·118	·114	·086	·072	·062	·060	·040	·032	·027	·019	·012	·008	·007	·004	·001	·003	·003	·001	·000	·000	—	—	—	—	—	—	1925
1926	·254	·247	·190	·156	·128	·125	·100	·084	·071	·064	·053	·041	·029	·026	·020	·019	·008	·006	·005	·004	·005	·002	·001	·000	·000	—	—	—	—	—	—	1926
1927	·244	·236	·178	·151	·132	·108	·105	·086	·077	·062	·051	·048	·031	·024	·021	·017	·011	·007	·006	·006	·004	·002	·000	·000	·000	—	—	—	—	—	—	1927
1928	·238	·251	·180	·154	·132	·112	·093	·084	·074	·062	·054	·040	·030	·026	·021	·017	·012	·008	·008	·006	·003	·002	·000	·000	·000	—	—	—	—	—	—	1928
1929	·233	·238	·181	·154	·132	·125	·097	·084	·069	·065	·055	·040	·033	·033	·022	·021	·014	·012	·007	·005	·003	·001	·000	·000	·000	—	—	—	—	—	—	1929
1930	·245	·231	·182	·156	·136	·126	·104	·100	·078	·057	·046	·042	·040	·035	·026	·022	·016	·010	·007	·005	·001	·000	·000	·000	·000	—	—	—	—	—	—	1930
1931	·233	·229	·174	·152	·132	·122	·104	·088	·074	·052	·049	·047	·046	·025	·025	·024	·015	·009	·006	·002	·002	·000	·000	·000	—	—	—	—	—	—	—	1931
1932	·230	·217	·173	·151	·137	·120	·101	·080	·059	·061	·057	·059	·054	·036	·034	·025	·015	·009	·004	·002	·001	·000	·000	—	—	—	—	—	—	—	—	1932
1933	·227	·231	·174	·153	·137	·120	·097	·080	·061	·062	·065	·062	·043	·037	·028	·013	·012	·006	·003	·002	·001	·000	—	—	—	—	—	—	—	—	—	1933
1934	·224	·228	·172	·155	·139	·112	·080	·070	·083	·082	·078	·053	·046	·036	·024	·017	·011	·005	·003	·002	·001	—	—	—	—	—	—	—	—	—	—	1934
1935	·226	·220	·184	·163	·119	·102	·085	·093	·109	·089	·070	·061	·044	·031	·022	·014	·008	·005	·003	·002	·001	—	—	—	—	—	—	—	—	—	—	1935
1936	·218	·225	·175	·153	·109	·110	·110	·120	·096	·081	·079	·057	·038	·027	·018	·012	·008	·005	·003	·001	·001	—	—	—	—	—	—	—	—	—	—	1936
1937	·199	·223	·170	·118	·112	·141	·139	·123	·108	·105	·081	·054	·037	·036	·017	·017	·007	·005	·002	·001	·001	—	—	—	—	—	—	—	—	—	—	1937
1938	·216	·208	·156	·134	·144	·152	·139	·123	·125	·097	·068	·049	·038	·025	·016	·012	·007	·004	·003	·001	·001	—	—	—	—	—	—	—	—	—	—	1938
1939	·178	·228	·168	·165	·161	·141	·135	·142	·112	·080	·061	·053	·036	·024	·017	·013	·009	·005	·003	·002	·001	—	—	—	—	—	—	—	—	—	—	1939
1940	·153	·195	·185	·178	·147	·158	·161	·131	·095	·074	·054	·038	·034	·025	·017	·012	·007	·005	·003	·002	—	—	—	—	—	—	—	—	—	—	—	1940
1941	·157	·219	·180	·174	·158	·175	·148	·110	·088	·066	·045	·040	·032	·022	·015	·012	·008	·004	·003	—	—	—	—	—	—	—	—	—	—	—	—	1941
1942	·170	·236	·177	·187	·163	·164	·130	·104	·081	·065	·049	·041	·031	·022	·016	·012	·008	·005	—	—	—	—	—	—	—	—	—	—	—	—	—	1942
1943	·217	·249	·214	·212	·187	·152	·123	·123	·069	·064	·049	·041	·030	·023	·016	·012	·008	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1943
1944	·215	·290	·248	·205	·168	·141	·114	·090	·078	·069	·048	·039	·033	·025	·019	·012	·006	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1944
1945	·213	·319	·245	·193	·167	·139	·110	·099	·081	·068	·053	·041	·034	·026	·018	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1945
1946	·262	·317	·223	·185	·158	·148	·113	·101	·081	·066	·055	·045	·035	·027	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1946
1947	·272	·298	·219	·182	·171	·155	·121	·102	·083	·069	·057	·045	·035	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1947
1948	·255	·317	·255	·192	·173	·148	·118	·100	·084	·070	·057	·046	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1948
1949	·238	·268	·201	·185	·172	·147	·120	·102	·083	·070	·056	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1949
1950	·249	·269	·216	·203	·178	·158	·136	·113	·095	·078	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1950
1951	·225	·257	·204	·192	·176	·154	·130	·108	·088	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1951
1952	·227	·257	·206	·193	·179	·162	·135	·108	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1952
1953	·225	·257	·220	·204	·193	·165	·137	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1953
1954	·228	·255	·228	·200	·196	·172	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1954
1955	·251	·269	·224	·222	·196	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1955
1956	·258	·269	·247	·231	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1956
1957	·265	·257	·251	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1957
1958	·275	·272	·280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1958
1959	·277	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1959

Marriage duration (exact years)

273

Table 2 (e).—Marriage age 30-34

Fertility rates

Calendar year of marriage	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1920-24	·276	·244	·182	·152	·121	·103	·082	·068	·046	·036	·025	·021	·012	·007	·005	·004	·002	·002	·001	·001	·000	·000	·000	—	—	—	—	—	—	—	—
1925	·268	·238	·160	·144	·116	·083	·068	·063	·050	·032	·025	·019	·010	·005	·002	·002	·001	·001	·000	·001	·000	·000	·000								
1926	·228	·207	·156	·121	·109	·072	·063	·057	·044	·021	·020	·008	·009	·007	·004	·000	·001	·001	·001	·000	·000	·000	·000								
1927	·241	·221	·164	·130	·101	·100	·062	·055	·038	·031	·028	·015	·007	·001	·001	·000	·002	·001	·001	·000	·000	·000	·000								
1928	·211	·222	·151	·114	·084	·082	·059	·054	·027	·031	·019	·010	·006	·003	·004	·002	·002	·002	·001	·000	·000	·000	·000								
1929	·226	·208	·135	·119	·094	·081	·070	·047	·045	·031	·018	·016	·003	·002	·002	·001	·003	·002	·000	·000	·000	·000	·000								
1930	·207	·220	·153	·118	·104	·076	·060	·044	·041	·028	·024	·015	·009	·005	·006	·004	·004	·002	·001	·000	·000	·000	·000								
1931	·211	·186	·142	·122	·098	·073	·072	·049	·029	·026	·024	·016	·009	·007	·006	·006	·004	·002	·001	·000	·000	·000	·000								
1932	·239	·188	·162	·130	·097	·082	·067	·056	·039	·035	·023	·029	·008	·011	·009	·006	·003	·002	·000	·000	·000	·000	·000								
1933	·223	·196	·139	·135	·101	·091	·061	·049	·055	·035	·039	·023	·014	·012	·008	·005	·001	·001	·000	·000	·000										
1934	·210	·194	·142	·123	·096	·078	·055	·048	·033	·038	·026	·019	·017	·012	·008	·005	·002	·000	·000	·000	·000										
1935	·211	·206	·148	·117	·092	·076	·060	·067	·052	·036	·028	·023	·015	·010	·007	·002	·001	·000	·000	·000											
1936	·196	·189	·151	·117	·088	·074	·074	·075	·038	·042	·031	·022	·013	·008	·004	·001	·000	·000	·000												
1937	·207	·200	·140	·098	·088	·090	·089	·073	·055	·042	·029	·019	·012	·005	·002	·002	·000	·000													
1938	·202	·207	·130	·116	·103	·115	·093	·061	·061	·042	·025	·017	·014	·010	·002	·002															
1939	·171	·184	·133	·122	·134	·113	·080	·085	·033	·037	·023	·014	·009	·004	·002	·001															
1940	·150	·189	·156	·133	·135	·113	·094	·071	·047	·029	·017	·012	·008	·004	·002	·001															
1941	·154	·215	·159	·130	·126	·118	·094	·063	·042	·028	·014	·011	·009	·003	·002	·001															
1942	·152	·198	·142	·160	·148	·121	·090	·063	·043	·029	·016	·012	·004	·004	·002	·001															
1943	·171	·202	·194	·172	·143	·111	·083	·057	·037	·028	·017	·013	·006	·004	·002	·001															
1944	·202	·248	·212	·170	·134	·105	·080	·052	·038	·027	·016	·011	·007	·004	·003	·001															
1945	·188	·272	·205	·157	·129	·101	·071	·057	·039	·030	·019	·012	·007	·004	·001																
1946	·194	·277	·190	·152	·122	·104	·077	·058	·041	·027	·013	·013	·007	·003																	
1947	·191	·263	·187	·149	·121	·101	·076	·056	·040	·027	·019	·012	·008																		
1948	·175	·247	·183	·153	·130	·105	·076	·058	·038	·030	·020	·011																			
1949	·176	·243	·177	·160	·131	·109	·077	·062	·044	·029	·021																				
1950	·230	·259	·190	·169	·144	·117	·087	·071	·050	·036																					
1951	·207	·240	·174	·155	·137	·109	·084	·061	·046																						
1952	·217	·245	·178	·163	·136	·114	·084	·065																							
1953	·212	·243	·186	·157	·141	·107	·085																								
1954	·218	·229	·191	·160	·142	·112	·086																								
1955	·234	·237	·198	·162	·138																										
1956	·250	·247	·212	·177																											
1957	·243	·250	·206																												
1958	·247	·257																													
1959	·264																														

Table 2 (f).—Marriage age 35–39

Calendar year of marriage	Marriage duration (completed years)															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1920–24	·213	·176	·108	·092	·062	·041	·029	·021	·015	·007	·007	·003	·002	·002	·000	·001
1925	·216	·141	·108	·066	·047	·036	·031	·023	·008	·009	·008	·001	·002	·001	·002	·001
1926	·199	·142	·083	·061	·031	·030	·026	·015	·007	·009	·008	·002	·005	·003	·003	·001
1927	·208	·124	·088	·059	·038	·029	·019	·012	·010	·007	·001	·003	·002	·002	·003	·001
1928	·182	·131	·089	·064	·025	·034	·013	·008	·010	·008	·003	·003	·004	·002	·001	·000
1929	·177	·118	·094	·047	·038	·017	·027	·017	·003	·004	·008	·003	·002	·004	·000	·000
1930	·160	·156	·092	·078	·045	·039	·014	·007	·010	·003	·001	·002	·000	·002	·000	·000
1931	·187	·125	·082	·065	·067	·033	·016	·011	·008	·007	·001	·001	·000	·002	·000	·000
1932	·160	·131	·085	·041	·045	·030	·018	·015	·004	·005	·001	·000	·000	·001	·001	·000
1933	·178	·140	·076	·043	·030	·032	·010	·013	·001	·005	·000	·002	·002	·001	·001	·000
1934	·180	·143	·086	·059	·041	·031	·021	·003	·002	·005	·002	·003	·002	·000	·000	·000
1935	·136	·107	·072	·057	·029	·029	·011	·016	·007	·032	·001	·002	·002	·001	·001	·000
1936	·166	·137	·085	·067	·041	·027	·032	·013	·013	·006	·004	·002	·001	·000	·000	·000
1937	·134	·137	·094	·071	·030	·024	·024	·028	·006	·005	·002	·002	·000	·001	·000	·000
1938	·151	·124	·087	·044	·043	·033	·039	·017	·011	·006	·004	·002	·002	·000	·000	·000
1939	·123	·118	·086	·063	·056	·023	·021	·018	·011	·005	·000	·001	·002	·000	·000	·000
1940	·103	·124	·077	·093	·042	·036	·029	·019	·009	·004	·001	·001	·000	·000	·000	—
1941	·117	·137	·095	·076	·056	·044	·029	·015	·006	·003	·001	·001	·000	·000	—	
1942	·109	·137	·089	·071	·053	·043	·024	·012	·005	·002	·002	·000	·000	—		
1943	·116	·145	·102	·089	·062	·038	·022	·012	·005	·003	·002	·000	—			
1944	·112	·171	·120	·086	·056	·034	·019	·010	·006	·002	·001	—				
1945	·140	·176	·122	·081	·056	·033	·016	·010	·006	·002	·002	—				
1946	·136	·183	·113	·082	·021	·035	·021	·012	·006	·003	·002	—				
1947	·125	·174	·114	·076	·049	·034	·021	·014	·006	·003	·001	—				
1948	·121	·169	·110	·077	·050	·034	·020	·010	·006	·003	·001	—				
1949	·121	·160	·105	·079	·053	·037	·020	·010	·005	·004	·001	—				
1950	·152	·172	·110	·081	·057	·036	·021	·015	·006	·004	—					
1951	·130	·155	·101	·075	·050	·030	·019	·012	·005	—						
1952	·132	·151	·095	·072	·048	·035	·021	·012	—							
1953	·145	·164	·098	·078	·048	·036	·020	—								
1954	·145	·161	·109	·076	·052	·036	—									
1955	·160	·156	·106	·083	·060	—										
1956	·168	·167	·120	·081	—											
1957	·167	·165	·128	—												
1958	·175	·179	—													
1959	·181	—														

Table 2 (g).—Marriage age 40–44

Calendar year of marriage	Marriage duration (completed years)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1920–24	·117	·058	·029	·023	·015	·010	·006	·011	·006	·003	·003	·005	·003	·002	·001
1925	·048	·056	·029	·017	·002	·007	·012	·000	·000	·000	·006	·000	·000	·003	·000
1926	·109	·034	·028	·013	·008	·004	·007	·011	·003	·013	·006	·000	·003	·004	·000
1927	·107	·030	·008	·005	·007	·004	·002	·011	·006	·000	·004	·000	·000	·000	·000
1928	·065	·037	·012	·010	·005	·002	·003	·000	·006	·000	·004	·003	·000	·003	·000
1929	·106	·020	·009	·007	·006	·000	·001	·006	·006	·000	·003	·003	·002	·003	·000
1930	·108	·038	·023	·009	·009	·010	·000	·003	·000	·004	·003	·000	·000	·000	·000
1931	·087	·013	·013	·005	·009	·004	·007	·000	·004	·003	·004	·001	·000	·002	·000
1932	·109	·007	·007	·008	·005	·001	·001	·000	·004	·003	·004	·002	·000	·001	·001
1933	·097	·006	·024	·006	·003	·001	·000	·000	·000	·000	·000	·003	·000	·001	·000
1934	·114	·038	·020	·014	·002	·002	·000	·001	·000	·000	·000	·000	·002	·000	·000
1935	·078	·010	·009	·010	·004	·000	·000	·001	·000	·000	·000	·000	·002	·001	·001
1936	·061	·029	·014	·005	·007	·004	·000	·003	·002	·000	·000	·002	·001	·000	·000
1937	·032	·026	·024	·008	·007	·001	·000	·000	·001	·000	·000	·002	·000	·000	·000
1938	·077	·031	·024	·006	·003	·002	·000	·000	·000	·000	·000	·000	·000	·000	·000
1939	·114	·031	·020	·013	·004	·000	·004	·001	·000	·000	·000	·001	·000	·000	·000
1940	·026	·041	·009	·010	·005	·006	·002	·001	·000	·000	·000	·000	·000	·000	·000
1941	·033	·045	·014	·017	·010	·003	·002	·001	·000	·000	·000	·001	·001	·000	—
1942	·041	·055	·023	·012	·007	·005	·002	·001	·000	·000	·000	·000	·000	—	
1943	·056	·050	·024	·016	·008	·004	·002	·000	·000	·000	·000	·000	—		
1944	·047	·046	·023	·016	·007	·003	·001	·000	·000	·000	·000	—			
1945	·040	·049	·030	·014	·007	·003	·001	·001	·000	·000	—				
1946	·040	·051	·028	·014	·007	·003	·002	·000	·000	—					
1947	·038	·050	·029	·012	·005	·003	·000	·000	—						
1948	·036	·047	·006	·006	·004	·003	·000	—							
1949	·036	·040	·021	·007	·006	·002	—								
1950	·045	·034	·025	·008	·006	·003	—								
1951	·042	·033	·020	·007	·004	·002	—								
1952	·039	·035	·009	·009	·004	·002	—								
1953	·041	·035	·020	·009	·004	·002	—								
1954	·042	·043	·022	·010	·005	·002	—								
1955	·040	·039	·024	·013	·006	—									
1956	·059	·039	·021	·011	—										
1957	·041	·035	·020	—											
1958	·055	·045	—												
1959	·053	—													

APPENDIX B

FERTILITY RATES BY BIRTH ORDER, ENGLAND AND WALES, 1960

Live births per woman married once only, irrespective of parity

Figures are rounded and may not add to totals

1960

Age at marriage — Number of previous children

Calendar year of marriage	All ages under 45						Under 20						20–24						25–29						Calendar year of marriage
	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	
1960	·120	·118	·001	·000	·000	·000	·210	·209	·001	·000	·000	—	·090	·089	·001	·000	·000	·000	·086	·083	·002	·001	·000	·000	1960
1959	·351	·328	·022	·001	·000	·000	·423	·385	·037	·001	·000	·000	·332	·313	·017	·001	·000	·000	·343	·323	·017	·002	·001	·000	1959
1958	·266	·153	·105	·007	·001	·000	·315	·142	·162	·010	·000	·000	·257	·161	·090	·006	·000	·000	·263	·168	·084	·008	·001	·001	1958
1957	·249	·092	·126	·027	·003	·001	·290	·076	·164	·047	·003	·000	·246	·103	·119	·022	·002	·000	·247	·102	·119	·022	·003	·001	1957
1956	·229	·063	·114	·043	·008	·001	·260	·046	·128	·066	·014	·006	·236	·072	·118	·038	·007	·002	·224	·069	·111	·034	·007	·002	1956
1955	·200	·043	·093	·046	·015	·004	·228	·031	·095	·069	·027	·006	·209	·051	·100	·042	·012	·003	·193	·046	·092	·040	·011	·004	1955
1954	·173	·030	·072	·045	·018	·007	·208	·022	·073	·066	·034	·014	·180	·036	·079	·043	·016	·006	·162	·031	·072	·040	·013	·005	1954
1953	·146	·021	·056	·040	·018	·010	·181	·015	·057	·056	·033	·021	·155	·025	·063	·041	·017	·009	·130	·021	·052	·035	·014	·008	1953
1952	·124	·015	·042	·035	·018	·013	·166	·012	·043	·049	·033	·029	·131	·017	·048	·037	·017	·011	·107	·016	·039	·029	·013	·009	1952
1951	·099	·010	·030	·028	·016	·014	·139	·009	·031	·040	·028	·031	·106	·012	·035	·030	·016	·013	·081	·011	·027	·022	·012	·009	1951
1950	·093	·008	·024	·026	·017	·017	·140	·006	·026	·039	·030	·038	·100	·010	·028	·029	·017	·016	·074	·008	·021	·021	·012	·011	1950
1949	·070	·005	·016	·020	·013	·016	·112	·005	·017	·030	·024	·036	·075	·006	·019	·021	·014	·015	·053	·005	·014	·015	·009	·010	1949
1948	·059	·004	·012	·016	·011	·016	·096	·004	·014	·023	·020	·036	·064	·005	·014	·018	·012	·015	·043	·004	·010	·012	·008	·010	1948
1947	·048	·003	·008	·013	·010	·015	·085	·003	·011	·020	·019	·033	·054	·003	·010	·015	·011	·015	·032	·002	·006	·009	·006	·009	1947
1946	·039	·002	·006	·010	·008	·014	·072	·002	·007	·016	·015	·032	·045	·002	·007	·012	·009	·015	·024	·001	·004	·006	·005	·007	1946
1945	·033	·001	·004	·008	·007	·012	·060	·002	·006	·012	·013	·028	·037	·002	·005	·009	·008	·012	·017	·001	·003	·005	·004	·005	1945
1944	·028	·001	·003	·006	·006	·012	·055	·001	·004	·011	·012	·026	·031	·001	·004	·007	·007	·012	·011	·000	·001	·003	·002	·004	1944
1943	·024	·001	·002	·005	·005	·011	·046	·001	·004	·009	·009	·023	·027	·001	·003	·006	·005	·012	·006	·000	·000	·001	·001	·003	1943
1942	·019	·001	·002	·004	·004	·009	·043	·001	·004	·008	·008	·022	·021	·001	·002	·004	·005	·009	·004	·000	·000	·001	·001	·002	1942
1941	·014	·000	·001	·003	·003	·007	·036	·001	·002	·004	·006	·021	·016	·000	·002	·003	·003	·007	·002	·000	·000	·001	·000	·001	1941
1940	·011	·000	·001	·002	·002	·006	·034	·000	·002	·006	·006	·020	·011	·000	·001	·002	·002	·005	·001	·000	·000	·000	·000	·000	1940
1939	·008	·000	·000	·001	·001	·005	·031	·000	·001	·004	·005	·021	·007	·000	·000	·001	·001	·004	·001	·000	·000	·000	·000	·001	1939
1938	·005	·000	·000	·000	·001	·003	·023	·000	·001	·002	·003	·016	·005	·000	·000	·001	·001	·003	·000	·000	—	·000	·000	·000	1938
1937	·003	·000	·000	·000	·000	·002	·019	·000	·001	·002	·002	·014	·003	·000	·000	·000	·001	·002							1937
1936	·002	·000	·000	·000	·000	·001	·012	·000	·000	·001	·002	·009	·001	·000	·000	·000	·000	·001							1936
1935	·001	·000	·000	·000	·000	·001	·009	—	·000	·000	·001	·008	·001	·000	·000	·000	·000	·001							1935
1934	·001	·000	·000	·000	·000	·000	·004	·000	·000	·000	·000	·003	·000	·000	·000	·000	·000	·000							1934
1933	·000	—	·000	·000	·000	·000	·002	—	·000	·000	·000	·002	·000	—	·000	·000	·000	·000							1933

Age at marriage

Number of previous children

Calendar year of marriage	30-34						35-39						40-44					
	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more
1960	·077	·073	·002	·001	·001	·000	·057	·052	·002	·002	·000	·001	·028	·026	·001	—	·001	·000
1959	·324	·301	·018	·003	·001	·001	·215	·202	·011	·001	·000	·001	·056	·052	·002	—	·001	—
1958	·225	·144	·071	·007	·002	·002	·145	·098	·041	·005	·001	·000	·032	·025	·007	·000	—	—
1957	·195	·073	·097	·019	·005	·002	·112	·045	·051	·011	·003	·001	·013	·008	·004	·001	—	—
1956	·163	·045	·077	·031	·006	·003	·069	·021	·032	·011	·003	·002	·009	·004	·003	·001	·000	·000
1955	·129	·028	·057	·030	·009	·004	·054	·013	·021	·015	·003	·002	·004	·002	·001	·000	·000	—
1954	·102	·020	·043	·023	·011	·004	·029	·006	·012	·007	·002	·002	·002	·000	·001	·000	·000	—
1953	·080	·013	·030	·020	·011	·006	·016	·002	·005	·004	·003	·001	·000	·000	·000	—	—	—
1952	·060	·009	·019	·017	·009	·006	·009	·002	·002	·002	·002	·001						
1951	·039	·005	·012	·010	·006	·005	·003	·000	·000	·001	·001	·000						
1950	·030	·003	·008	·008	·006	·006	·002	·000	·000	·000	·000	·001						
1949	·018	·002	·004	·005	·004	·004	·001	—	·000	·000	·000	—						
1948	·011	·001	·002	·002	·002	·003	·001	·000	—	·000	·000	·001						
1947	·006	·000	·001	·000	·001	·002												
1946	·003	·000	·000	·000	·001	·001												
1945	·001	·000	·000	·000	·000	·001												

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APPENDIX E

ARTICLES BY OFFICERS OF THE GENERAL REGISTER OFFICE PUBLISHED DURING 1960

BENJAMIN, B. .. .. Statistical problems connected with the 1961 population census. *Journal of the Royal Statistical Society*, vol. 123. pp. 413–426.

BENJAMIN, B. .. .. The Royal Statistical Society. *Venture*, vol. 3, No. 6. pp. 94–96.

BENJAMIN, B. *and others* Vision, visual acuity and ocular refraction of young men. *Brit. med. J.*, vol. I. pp. 1394–1398.

BROOKE, Eileen M. .. Mental Health and the population. *Eugenics Review*, vol. 51. pp. 209–215.

HEASMAN, M. A. .. Vital statistics. 1960 *Medical Annual*.

LOGAN, W. P. D. .. National morbidity statistics in England and Wales. *Monthly Bulletin of the Ministry of Health*, vol. 19, February. pp. 20–26.

McKENZIE, A. .. .. Study of factors possibly concerned in causation (statistical aspects). *Cancer: Progress Volume*, edited by Ronald W. Raven. pp. 75–76.

McKENZIE, A. .. .. Survival in cancer of the digestive tract. *ACTA, Unio Internationalis Contra Cancrum*, vol. XVI, No. 7. pp. 1711–1715.

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